

Technical Note 1: Rebuttal

Site: 40 – 42 South Street, Worthing
Prepared by: Laura Jagiela
Approved by: Phil Allen MCIWEM C.WEM
Date: 5th February 2026

motion
84 North Street
Guildford
GU1 4AU
Tel: 01483 531300
www.motion.co.uk

1.0 Introduction

1.1 This technical Note has been produced by Motion to discuss the EA's and WSP's comments relating to the Flood Risk Assessment (FRA) on planning application AWDM/1386/25, which relates to the proposed development at 40 – 42 South Street, Worthing, West Sussex.

1.2 The EA's comments are as per the following:

"The FRA fails to:

Consider how a range of flooding events (including extreme events) will affect people and property.

Take the impacts of climate change into account:

Flood risk mitigation measures to address flood risk for the lifetime of the development included in the design are inadequate because they will not make the development resistant to the flood levels for the 0.5% AEP (2115) tidal design flood event. Consequently, the development proposes inadequate raised finished floor levels."

1.3 WSP's comments are as per the following:

"Due to the proposed redevelopment and increase in vulnerability classification of the Site, the sequential test is required."

1.4 WSP stated the site is next to an area of high surface water flood risk. However, the FRA reports that the proposed site itself has a very low risk, so no further comments are required.

1.5 WSP has also provided comments regarding tidal flood zones. However, as the Environment Agency is the designated authority on tidal flood risk, it is not necessary for us to respond to WSP on this issue, as it falls outside their role as agents for the Lead Local Flood Authority (LLFA).

2.0 The Development Site

2.1 The site is located on the west side of South Street in the centre of Worthing. The existing site consists of a commercial unit housing a dessert shop on part of the ground floor with the rear area being unused. The upper floors are currently empty/unused but were previously used as storerooms for the retail unit.

2.2 The proposal is for the conversion, alteration, extension and demolition of the existing building to extend the ground floor commercial floorspace as well as include 9no. residential flats across the ground, first, second and third floors.

2.3 To understand the topographic levels of the site, LiDAR (Light Detection and Ranging) data had been obtained. The ground levels in front of the retail unit, on South Street along the western edge of the site, is shown to be approximately 4.8 mAOD. The rear of the site, which fronts onto Marine Place, is shown to be higher at 5.8 mAOD. This shows around a 0.9m (900mm) to 1.0m level difference between the front and rear of the site.

2.4 During the development of the previous application on the site, which was consented and drew no objection on flood risk grounds, a survey of the building was taken, but this was carried out in Local Datum rather than Ordnance Datum, thus the levels do not numerically correspond to each other.

2.5 In Local Datum (LD) the ground levels to the front (west) of the building are 12.51 mALD, which rises to 12.93 mALD in the centre of the building. There are no further levels to the rear of the building, but it can be

seen that there are four steps up from the floor level of 12.93 mALD and, if these steps have a minimum rising of 150mm (as per the requirements of UK Building Regulations Part K), this means that the rear of the building has a floor level that is at least 600mm higher than the middle of the building and 1.02m higher than the front of the building.

3.0 Discussion

- 3.1 The EA state that the design flood level for areas at risk of tidal inundation, should be a 1 in 200 annual probability event plus an allowance for climate change.

EA Product 4 Data

- 3.2 To assess tidal flood levels at the site, Flood Risk Assessment Data (Product 4) was requested from the EA. The EA Product 4 data for the location was unavailable when the FRA was issued on 16 September 2025, but it has now been received.
- 3.3 The tidal flood levels have been modelled and recorded for 4 nodes across the site. The location of these nodes can be seen in **Appendix A**. Nodes 1 and 2 are situated within the area of the existing commercial unit, while node 3 is positioned in the proposed courtyard and node 4 lies within the proposed ground floor dwelling.
- 3.4 The EA Product 4 Tidal Flood Levels and Depths can be seen in **Appendix B**. The EA tidal flood levels are not provided for all node locations, specifically for Nodes 3 and 4. This means that there is no flooding modelled in this location because the ground level is higher than predicted flood level. Therefore, this demonstrates that the area of the site where the proposed ground floor dwelling and courtyard will be located is not predicted to be at risk of flooding and, therefore, is in Flood Zone 1.
- 3.5 For Nodes 1 and 2, the highest tidal flood levels for the predicted future year 2115 1:200 tidal event is 5.26 mAOD.
- 3.6 As specified in the FRA, sections 4.10 to 4.11, the front of the building is situated at approximately 4.8 mAOD. Based on product 4 data, these areas may be subject to an estimated flood depth of up to 460 mm when compared to the projected highest tidal flood level for the year 2115 (1:200 tidal event), which is 5.26 mAOD. The rear of the building is positioned at approximately 5.8 mAOD, 540 mm above the maximum predicted level. This could be raised to 5.86 mAOD as the National Planning Policy Framework (NPPF) advises that finished floor levels should be constructed at least 600 mm above the estimated flood level. However, where there is a high degree of certainty in the flood level estimates, this requirement may be reduced to 300 mm. Therefore, the floor level of the rear of the building is appropriate.
- 3.7 The EA comments mention a need to comply with a previously agreed finished floor level of 13.50, and has questioned why this hasn't been achieved in the current application. We would like to emphasise that these levels are based upon the Local Datum rather than ordnance datum, so the levels the EA refer to cannot be directly compared with the EA flood level data or the LiDAR data, and the level of 13.50 cannot be achieved in Ordnance Datum.

Sequential Test

- 3.8 According to the NPPF, a sequential test is not always required, and the Planning Practice Guidance (PPG) clarifies exemptions through Paragraphs 175, 176, and 180.
- 3.9 When applying Paragraph 175, a proportionate approach should be taken. Where a site-specific flood risk assessment demonstrates clearly that the proposed layout, design, and mitigation measures would ensure that occupiers and users would remain safe from current and future surface water flood risk for the lifetime of the development (therefore addressing the risks identified e.g. by Environment Agency flood risk mapping), without increasing flood risk elsewhere, then the sequential test need not be applied.

- 3.10 Paragraph 176 states that '*Applications for some minor development and changes of use should also not be subject to the sequential test.*' The proposed development at 40 – 42 South Street is for the change of use and therefore is exempt from the sequential test.
- 3.11 The WSP objections are not relevant in this context of this development.

4.0 Summary and Conclusion

- 4.1 This technical Note has reviewed the comments made by the EA and WSP relating to the flood risk assessment on consent AWDM/1386/25, which relate to 40 – 42 South Street, Worthing, West Sussex.
- 4.2 The EA Product 4 flood risk data, indicates that while the front portion of the site (Nodes 1 and 2) may experience tidal flooding of up to 460 mm by 2115, the proposed ground floor dwelling and courtyard (Nodes 3 and 4) are not predicted to be at risk, as their ground levels exceed projected flood levels. The rear of the building, at approximately 5.8 mAOD, is situated well above the anticipated maximum flood level, and the proposed finished floor levels are considered appropriate in this context.
- 4.3 According to the NPPF and PPG, the proposed development, which involves a change of use, is exempt from the sequential test typically required for flood risk assessment. The submitted flood risk assessment demonstrates that the design and mitigation measures will ensure the safety of future occupiers and prevent any increase in flood risk elsewhere. Consequently, objections regarding the sequential test are not applicable, and the development is compliant with the relevant flood risk guidance and policy requirements.
- 4.4 The planning history along South Street demonstrates a clear and consistent pattern of support for mixed-use redevelopment, with recent approvals at 40–42, 38, 48, and 34–36 South Street all endorsing the conversion and extension of existing buildings to deliver new residential units while retaining or improving commercial uses. These decisions consistently highlight sustainable town-centre intensification, contributions to local housing supply, enhancement of the conservation area, and acceptability in flood-risk terms where safe access/egress and appropriate finished-floor levels are demonstrated. Collectively, they establish a strong precedent for schemes of this nature, reinforcing that the current proposal at 40–42 South Street aligns with well-established planning outcomes in the immediate locality.

Appendix A

EA Site Node Map



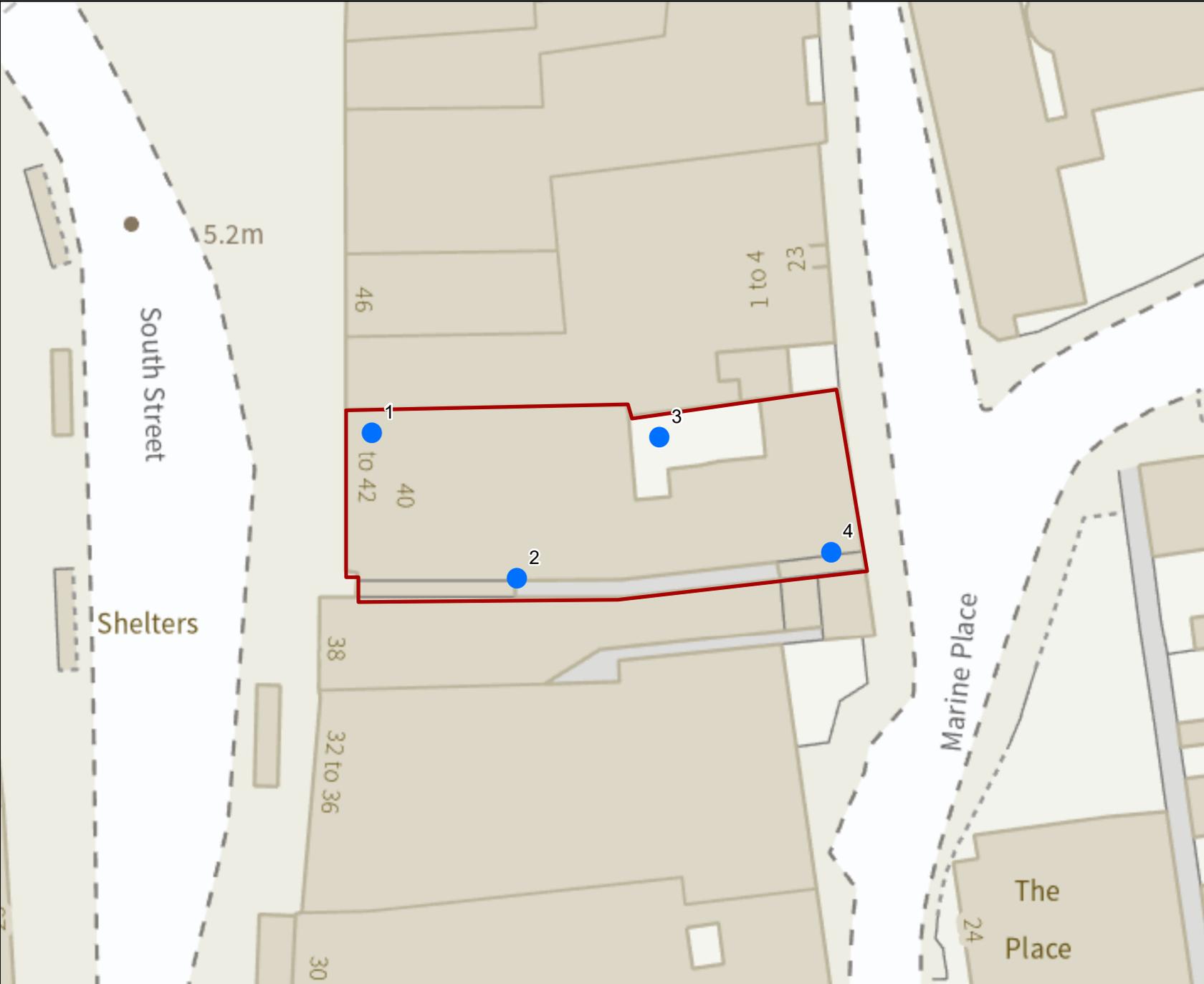
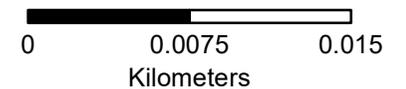
Legend

 Site Nodes

 Site Boundary

Annual Exceedance Probability (AEP) The probability of a flood of a particular magnitude, or greater occurring in any given year.

Scale: 1:350



Appendix B

EA Tidal Flood Levels and Depths

Product 4 Flood Risk Data Requested by: Phil Allen

Site: 40-42 South Street, Worthing, BN11 3AA

Table 1: Water Levels: Tidal Undefended

Node Ref	NGR		Modelled Flood Levels in Metres AOD			
			Undefended Annual Exceedance Probability			
	Eastings	Northings	0.5%	0.5% (2070)*	0.5% (2115)*	0.1%
1	514952	102557	-	-	5.26	-
2	514962	102547	-	-	5.26	-
3	514971	102556	-	-	-	-
4	514982	102549	-	-	-	-

Table 2: Water Levels: Tidal Defended

Node Ref	NGR		Modelled Flood Levels in Metres AOD			
			Defended Annual Exceedance Probability			
	Eastings	Northings	0.5%	0.5% (2070)*	0.5% (2115)*	0.1%
1	514952	102557	5.05	5.21	5.01	5.16
2	514962	102547	-	5.21	-	5.16
3	514971	102556	-	-	-	-
4	514982	102549	-	-	-	-

Table 3: Water Depths: Tidal Undefended

Node Ref	NGR		Modelled Flood Depths in Metres			
			Undefended Annual Exceedance Probability			
	Eastings	Northings	0.5%	0.5% (2070)*	0.5% (2115)*	0.1%
1	514952	102557	-	-	0.53	-
2	514962	102547	-	-	0.22	-
3	514971	102556	-	-	-	-
4	514982	102549	-	-	-	-

Table 4: Water Depths: Tidal Defended

Node Ref	NGR		Modelled Flood Depths in Metres			
	Eastings	Northings	Defended Annual Exceedance Probability			
			0.5%	0.5% (2070)*	0.5% (2115)*	0.1%
1	514952	102557	0.25	0.41	0.21	0.36
2	514962	102547	-	0.17	-	0.12
3	514971	102556	-	-	-	-
4	514982	102549	-	-	-	-

All levels taken from: Arun to Adur Coastal Modelling (2012), completed by JBA Consulting.

Produced on: 30/09/2025

*** The flood risk data provided is based on existing EA hydraulic models with an allowance for climate change. Please note the climate change allowances provided are not up to date. These were updated on 27 July 2021.**

You should refer to ['Flood risk assessments: climate change allowances'](#) for the most up to date allowances. You will need to undertake further assessment of future flood risk using different allowances to ensure your assessment of future flood risk is based on best available evidence.

There is no additional information or health warnings for these levels/depths or the model from which they have been produced.