Sheffield Level 2 Strategic Flood Risk Assessment - Site GBOM01/S03049

Final

May 2025

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Contract

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This report describes work commissioned by Sheffield City Council (SCC) by an instruction dated 23 January 2025. The Client's representative for the contract was Chris Hanson of SCC. Laura Thompson of JBA Consulting carried out this work.

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The methodology adopted and the sources of information used by JBA in providing its services are outlined in this Report. The work described in this Report was undertaken between January and May 2025 and is based on the conditions encountered and the information available during the said period. The scope of this Report and the services are accordingly factually limited by these circumstances.

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Acknowledgements

We would like to thank the Environment Agency for their assistance with this work.

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1 Background

This is a Level 2 Strategic Flood Risk Assessment (SFRA) site screening report for the Sheffield City Council (SCC) Local Plan Sites GBOM01 and S03049. The content of this Level 2 SFRA site screening report assumes the reader has already consulted the 'SCC Level 1 SFRA' (2022) and read the 'SCC Level 2 SFRA Main Report' (2024) and is therefore familiar with the terminology used in this report.

It is understood that the two sites assessed within this report are being considered separately within the local plan given they are under two different ownerships. However, for the purposes of this SFRA, they are being included in one site report given their overlapping nature.

1.1 Sites GBOM01 / S03049

- Addresses: GBOM01: Land to the north of Woodhouse Lane, S20 1AF. S03049: Land to the north of Beighton Road, S20 1AF
- Existing site use: Agriculture
- Existing site use vulnerability: Less vulnerable
- Proposed site use: Housing
- Proposed site use vulnerability: More vulnerable
- Site areas: GBOM01: 6.4 hectares. S03049: 1.9 hectares
- Proposed development impermeable areas: GBOM01: 4.4 hectares. S03049: 1.7 hectares
- Watercourse: River Rother and Shire Brook
- Environment Agency (EA) river model: Middle Lower Don 2015 - River Rother
- Summary of requirements from scoping stage:
    - Subject to the exception test as more vulnerable development proposed in Flood Zone 3a
    - Assessment of modelled fluvial flood depths, velocities and hazards
    - Assessment of surface water flood depths and hazards based on the EA's national Risk of Flooding from Surface Water dataset
    - Assessment of all other sources of flood risk
    - Modelling of latest EA climate change allowances for peak river flows and peak rainfall intensities
    - Potential residual risk from a blockage of the Shire Brook culvert beneath the railway and the River Rother A57 bridge

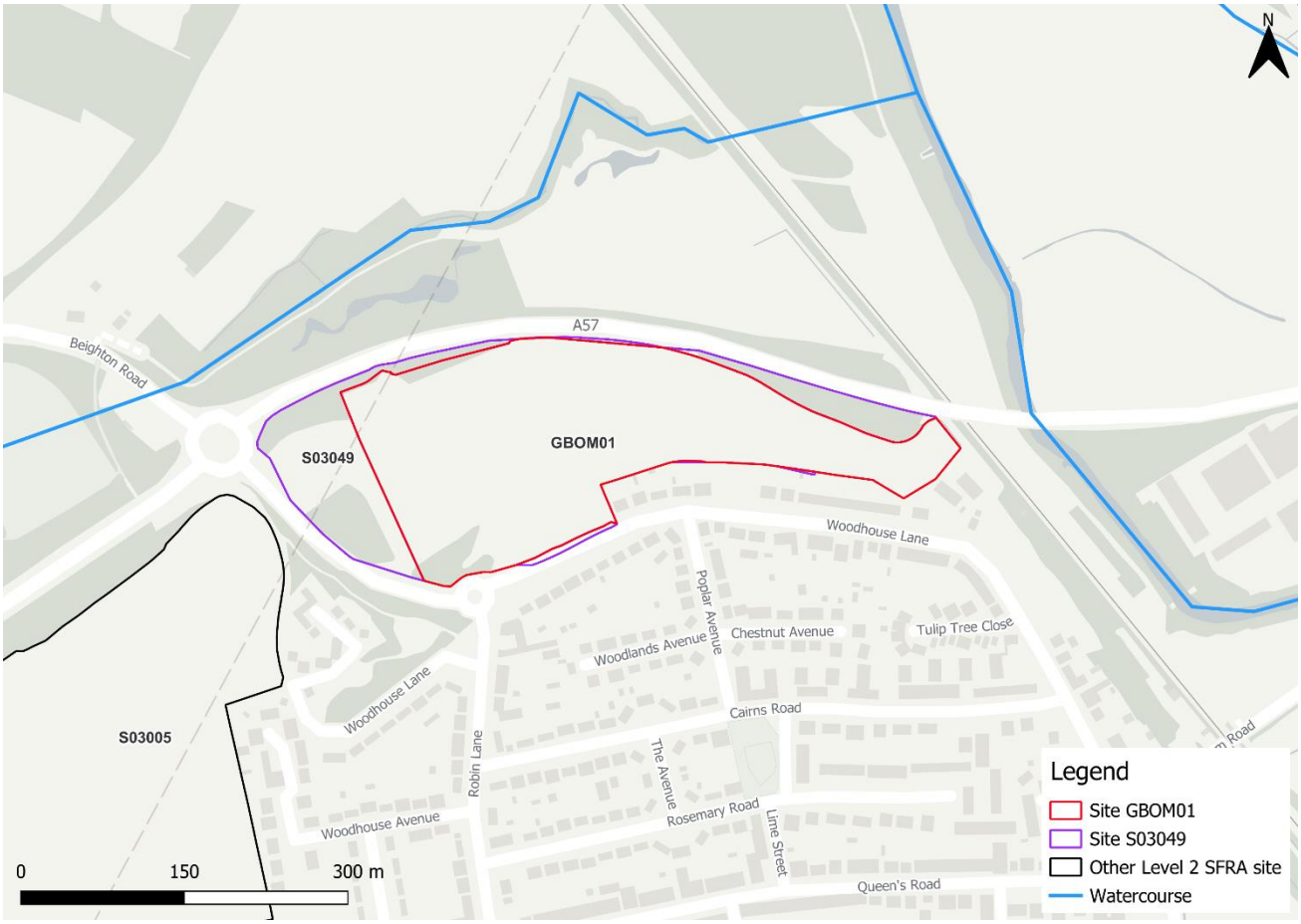

Figure 1-1: Existing site location boundary

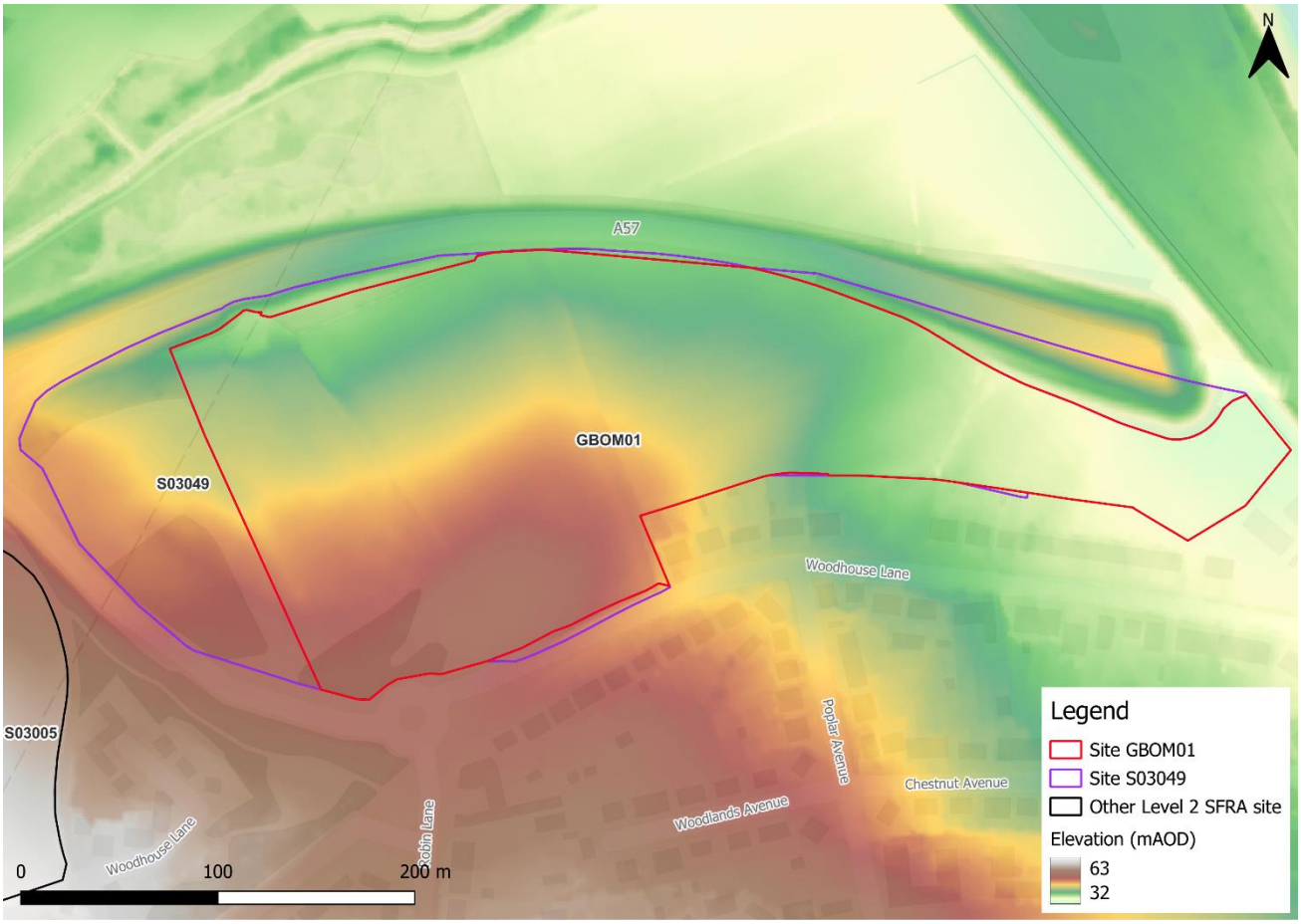

Figure 1-2: Topography

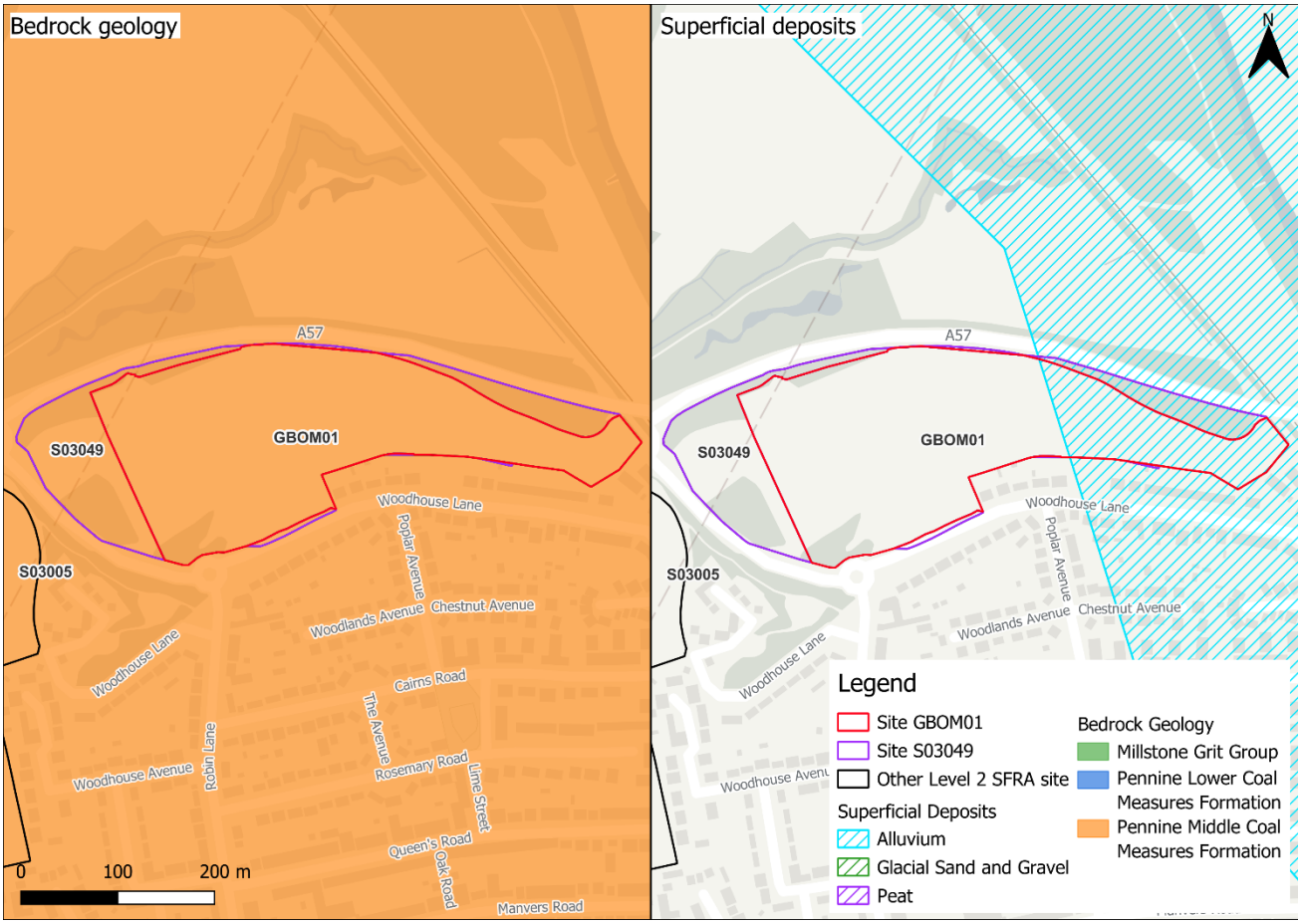

Figure 1-3: Soils and geology

2 Flood risk from rivers

2.1 Existing risk

2.1.1 Flood Map for Planning and functional floodplain

Based on the EA's Flood Map for Planning (February 2025) and Flood Zone 3b (functional floodplain), as updated in the Level 2 SFRA finalised in 2024, the percentage areas of the site within each fluvial flood zone are stated in Table 2-1 and can be viewed on Figure 2-1. This version of the Flood Map for Planning does not consider flood defence infrastructure (Section 2.3) or the impacts of climate change (Section 2.2).

Present day fluvial risk to both sites comes from Shire Brook to the north of the site. Future risk with climate change comes from both Shire Brook and the River Rother to the east which overtops the railway embankment. Shire Brook is a tributary of the River Rother. Both watercourses are designated main river. Functional floodplain is present within the east of the site. The area of functional floodplain onsite should be left free of development. The functional floodplain in this location is based on the 3.33% AEP defended event from the Middle Lower Don 2015 River Rother model and comes from Shire Brook. Flood Zone 3a and Flood Zone 2 are additionally present within very small areas in the east of the site.

Table 2-1: Existing fluvial flood risk based on percentage area of site at risk

Site	Flood Zone 1 (% area)	Flood Zone 2 (% area)	Flood Zone 3a (% area)	Flood Zone 3b (% area)
GBOM01	87	1	1	11
S03049	95	0	1	4

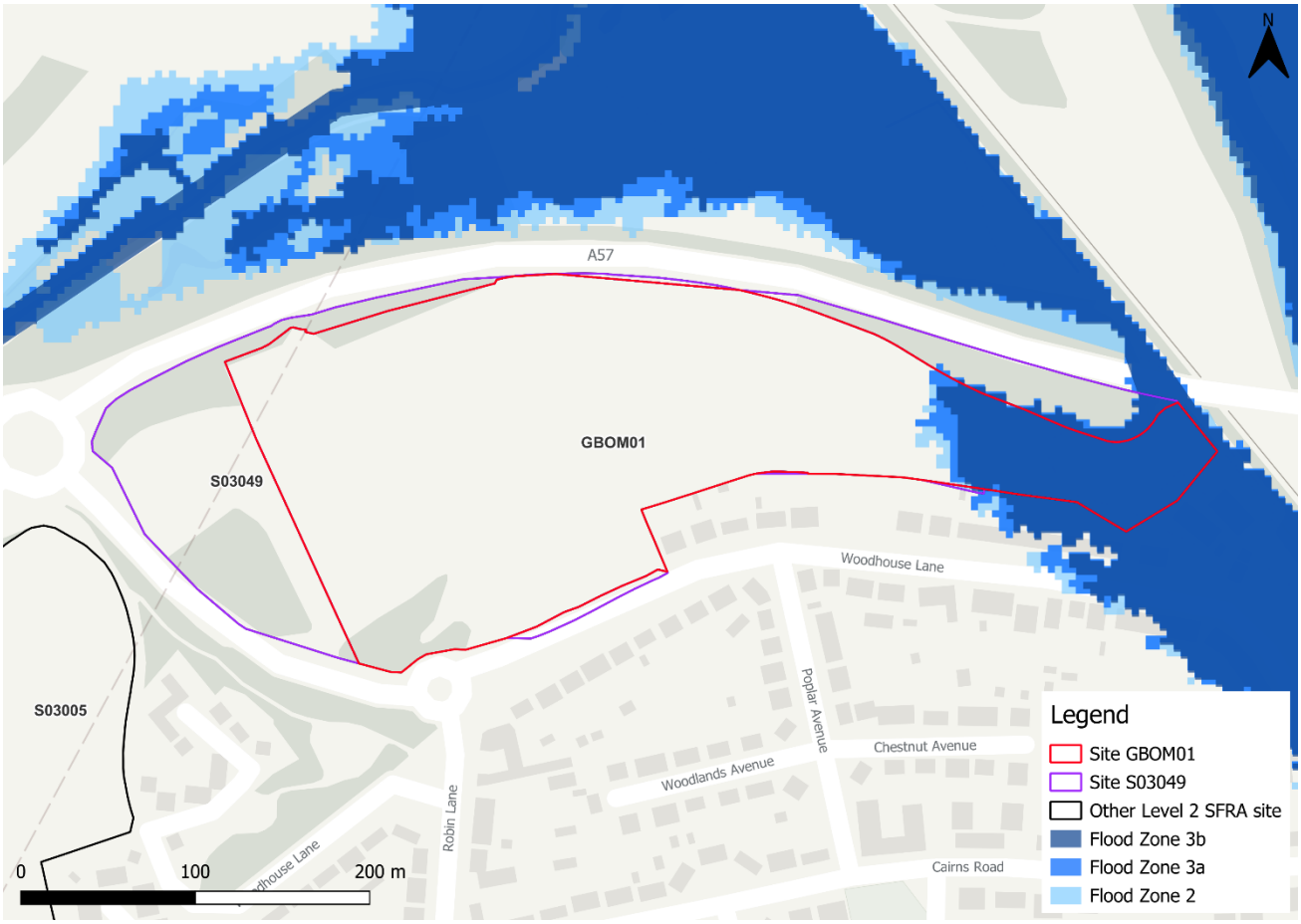

Figure 2-1: Existing risk from rivers to the site

2.1.2 Middle Lower Don 2015 undefended model outputs

Present day risk to the site comes from Shire Brook. Figure 2-2 shows the modelled flood depths for the 1% AEP undefended event which is the event Flood Zone 3 of the Flood Map for Planning is based on. Modelled risk to both sites is the same as that shown by Flood Zone 3a, impacting an area within the east of the site.

Maximum flood depths within both sites are modelled to be significant, at > 1.2 m. Modelled flood velocities are generally low across the area at risk (Figure 2-3), with velocity rarely exceeding 0.25 m^3/s. There is a small area along the eastern boundary of site S03049 where flood velocities are modelled to exceed 1 m^3/s, Modelled flood hazard is largely categorised as 'danger for most' across the area at risk, with a small area categorised as 'danger for all' (Figure 2-4). Safe access and escape routes would likely be achievable via Woodhouse Lane to the south and Beighton Road to the west of the site during a fluvial flood event.

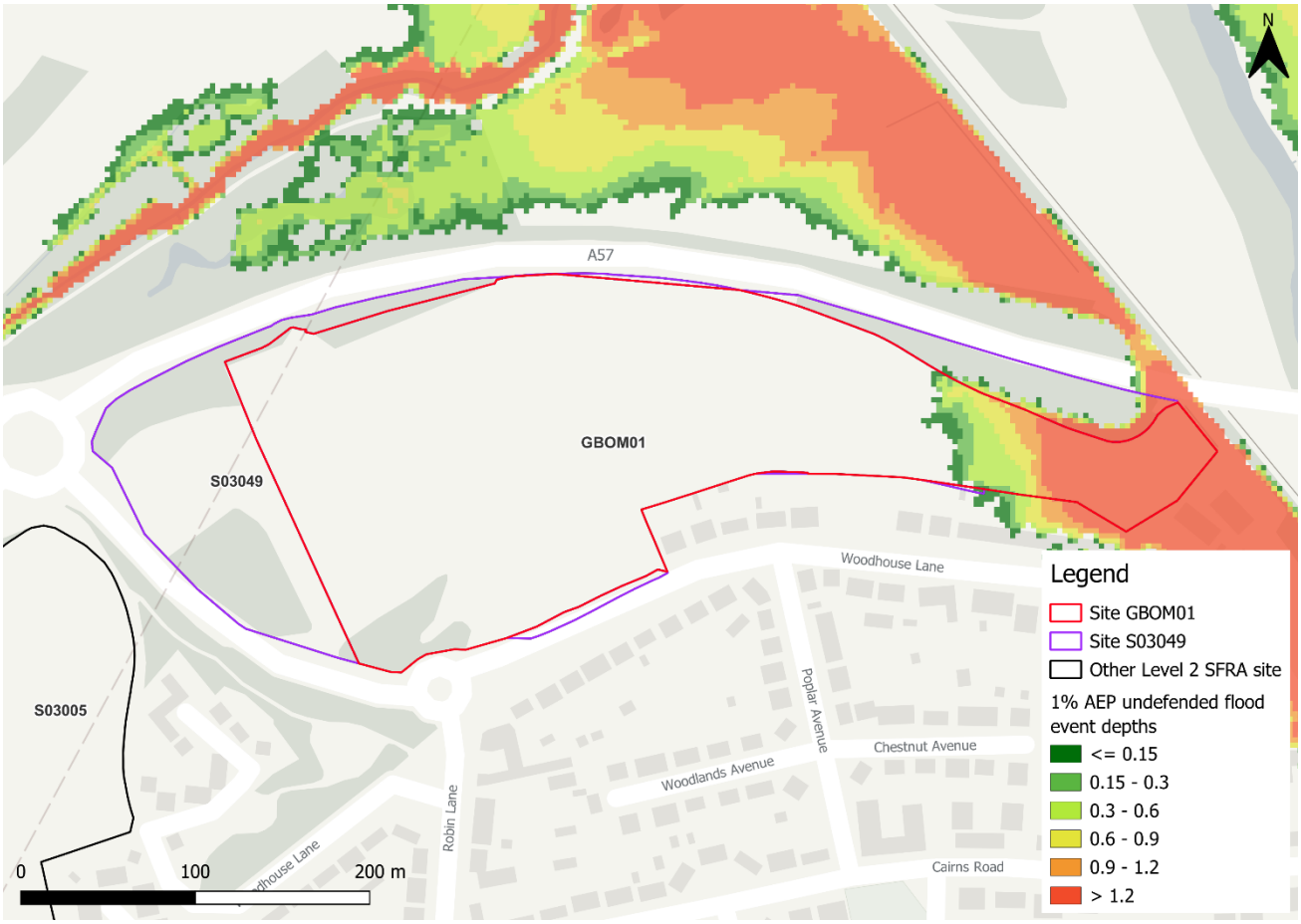

Figure 2-2: Flood depths for 1% AEP undefended flood event

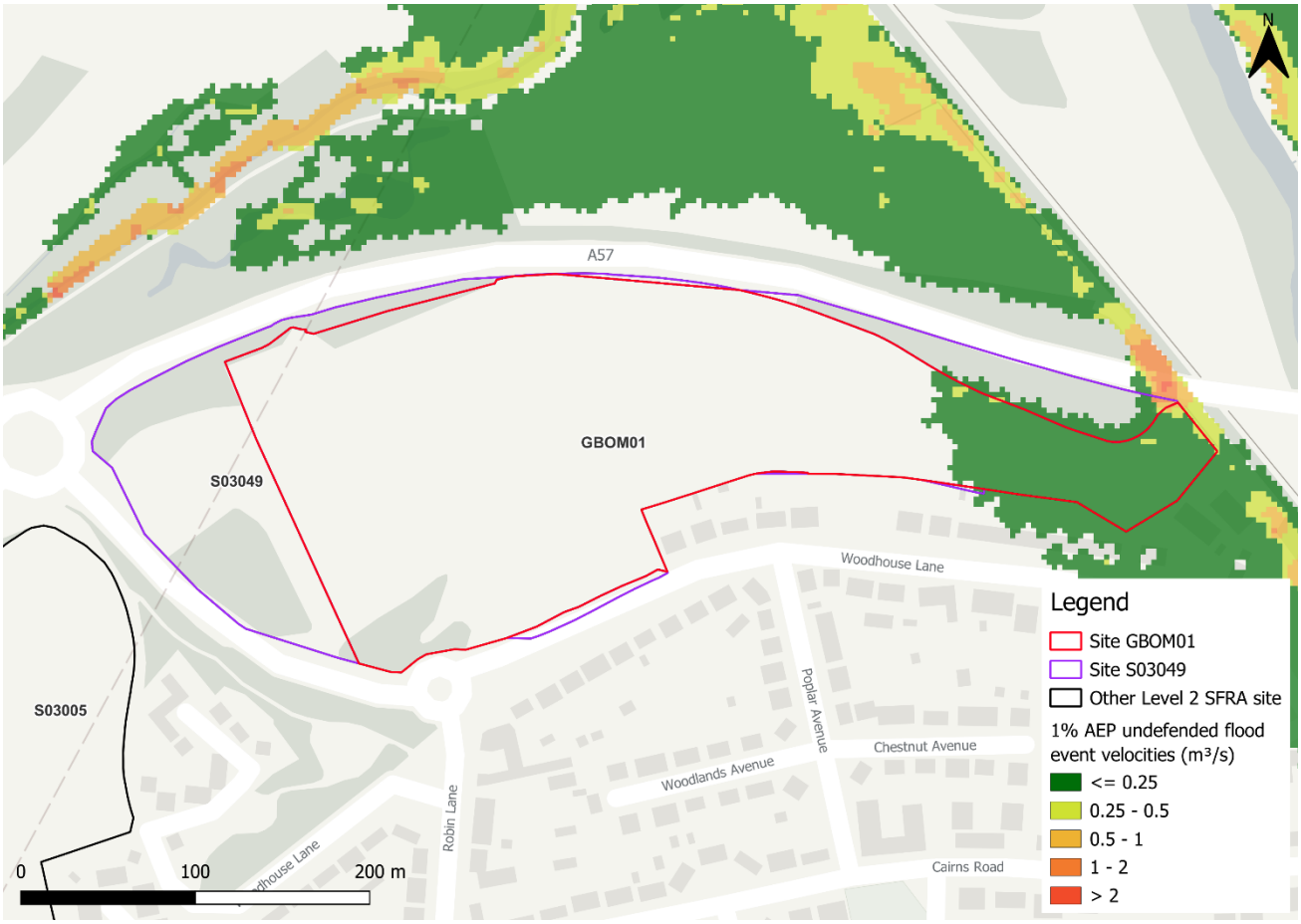

Figure 2-3: Flood velocities for 1% AEP undefended flood event

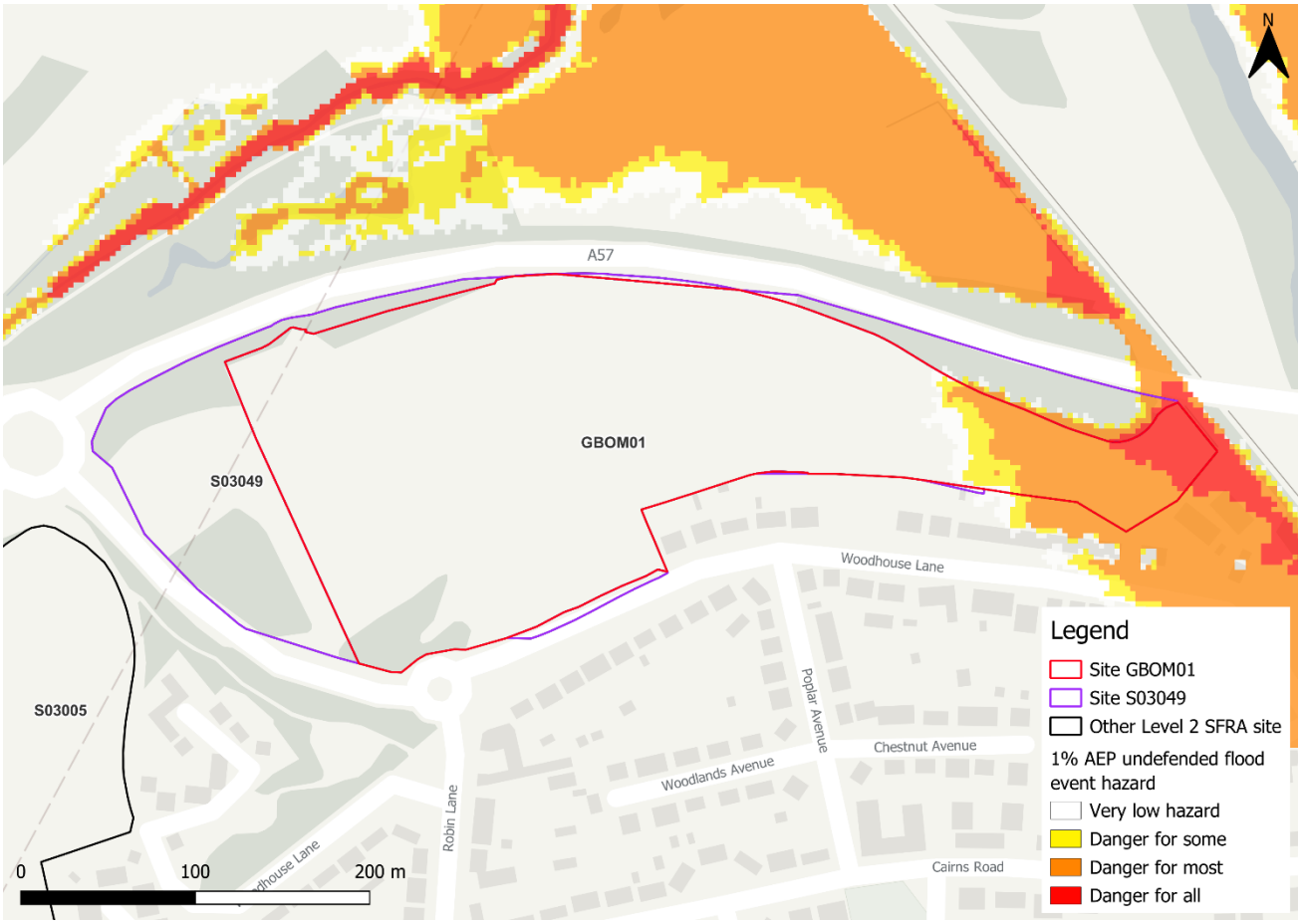

Figure 2-4: Flood hazard[1] for 1% AEP undefended flood event

2.2 Impacts from climate change

The impacts of climate change on flood risk from Shire Brook and the River Rother have been modelled without flood defence infrastructure in place. This allows for direct comparison with the existing risk of the Flood Map for Planning. Climate change modelling shows that there is additional risk to the site from the River Rother which overtops the railway embankment.

With consideration of the EA's SFRA guidance, the latest climate change central and higher central allowances have been modelled as shown in

Form

1 Fluvial hazard ratings based on Table 4 of the SUPPLEMENTARY NOTE ON FLOOD HAZARD RATINGS AND THRESHOLDS FOR DEVELOPMENT PLANNING AND CONTROL PURPOSE – Clarification of the Table 13.1 of FD2320/TR2 and Figure 3.2 of FD2321/TR1. May 2008.

Table 2-2~~Table 2-2~~. The EA's SFRA guidance states that SFRAs should assess the central allowance for less, more, and highly vulnerable development, and also water compatible development. The higher central should be assessed for essential infrastructure.

Table 2-2: Modelled climate change allowances for peak river flows for the Don and Rother Management Catchment

Return period (AEP event)	Central allowance 2080s (% increase)	Higher central allowance 2080s (% increase)	Upper end allowance 2080s (% increase)
3.3% (functional floodplain)	28%	38%	60%
1%	28%	38%	60%

The functional floodplain plus climate change dataset indicates that the area of functional floodplain onsite is likely to increase to a similar extent as the present day Flood Zone 3a in the future.

Figure 2-5~~Figure 2-5~~ shows the onsite modelled flood depths for the 1% AEP undefended event +38% for climate change (higher central allowance). Risk is modelled to be slightly greater in both extent and depth to present day conditions, impacting the east of the site. Maximum depths within the area at risk remain at greater than 1.2 m. Flood velocities are also modelled to remain similar (Figure 2-6~~Figure 2-6~~). Modelled flood hazard remains largely categorised as 'Danger for most', with areas of 'Danger for all' (Figure 2-7~~Figure 2-7~~). Safe access and escape routes should remain achievable via Woodhouse Lane to the south and Beighton Road to the west of the site during a climate change event.

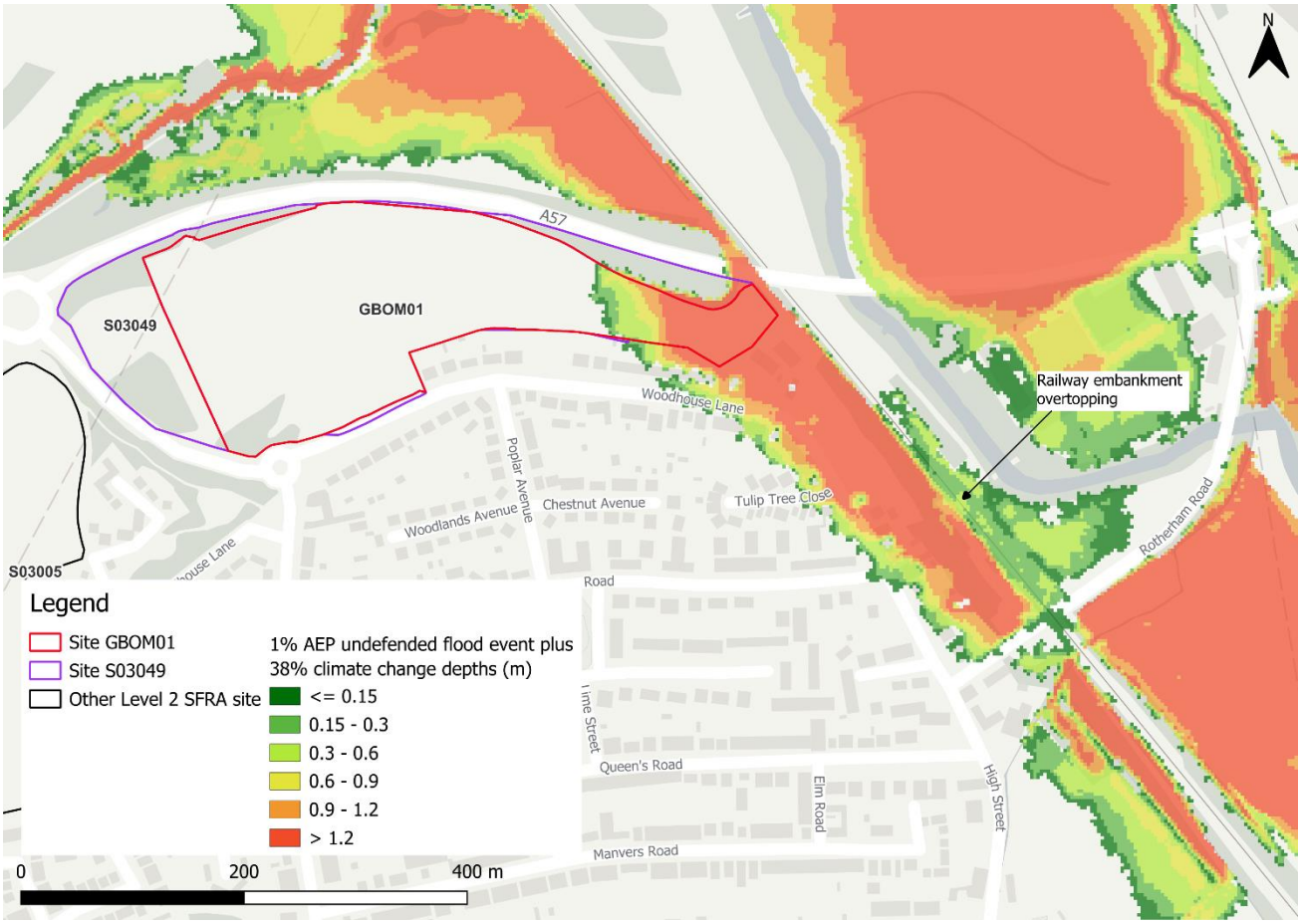

Figure 2-5: Flood depths for 1% AEP undefended flood event +38% (higher central climate change allowance)

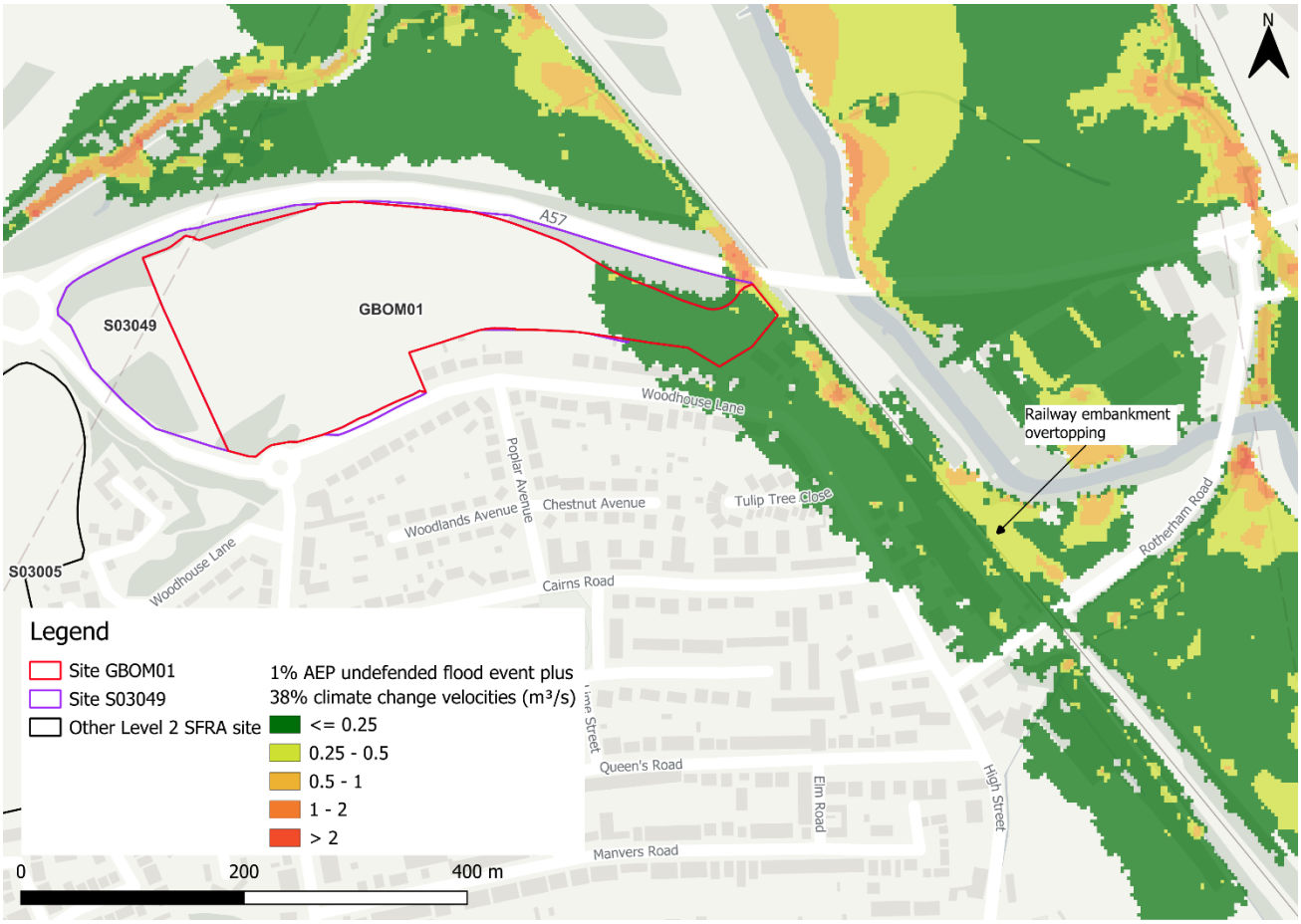

Figure 2-6: Flood velocities for 1% AEP undefended flood event +38% (higher central climate change allowance)

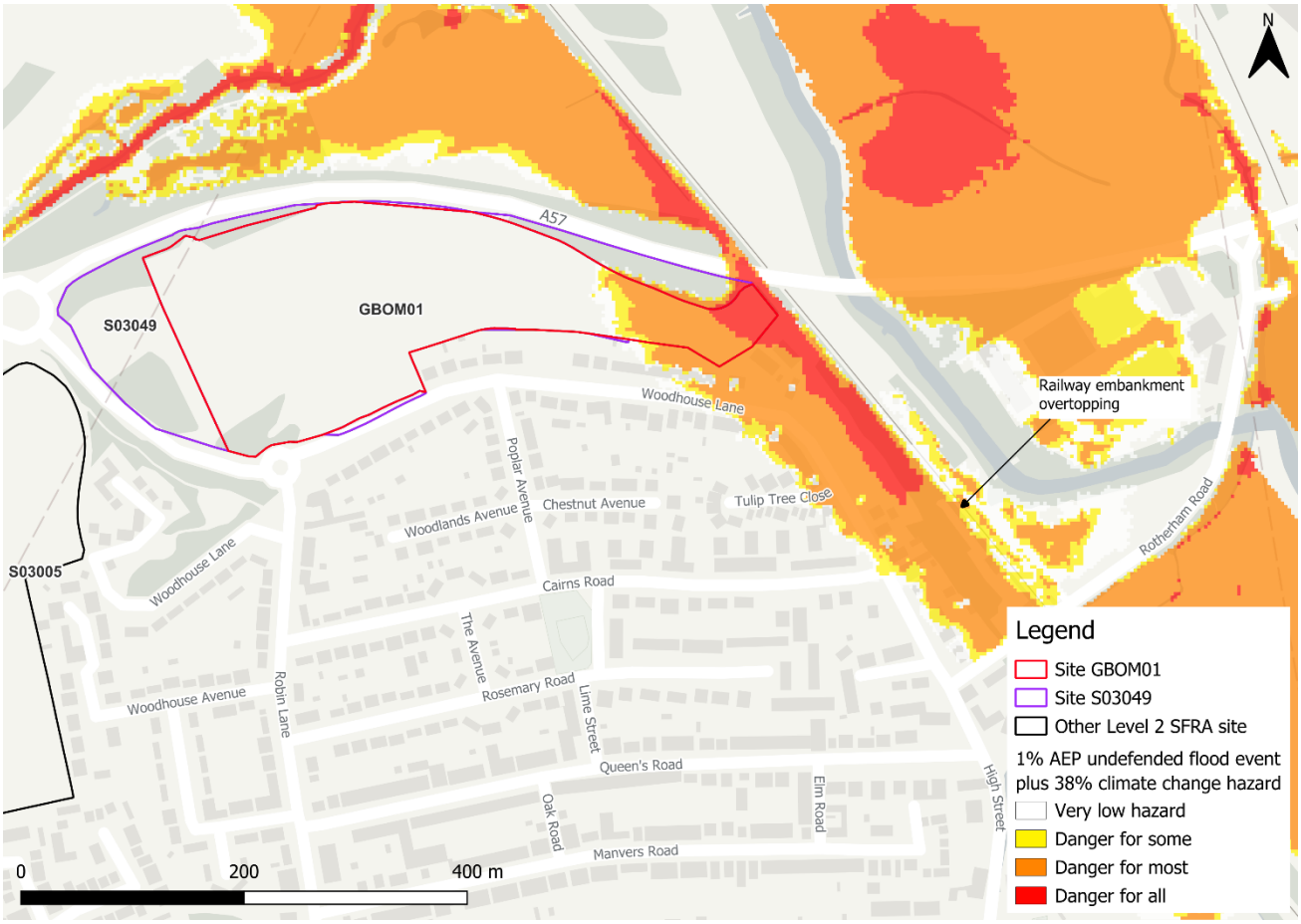

Figure 2-7: Flood hazard for 1% AEP undefended flood event +38% (higher central climate change allowance)

2.3 Flood risk management

2.3.1 Flood defences

The site does not benefit from any formal engineered flood defences, according to the EA's spatial flood defences dataset.

2.3.2 Working with Natural Processes

The EA's Working with Natural Processes (WwNP) dataset has been interrogated to identify opportunities for Natural Flood Management (NFM) that may help to reduce flood risk to the site and surrounding areas. Both within and upstream of the site, there are opportunities for floodplain woodland planting to attenuate flooding. Within the site, there is potential for runoff attenuation features which indicate areas where enhanced storage may be achievable. There is also potential for floodplain reconnection to reconnect the channel to the natural floodplain. These areas are shown in Figure 2-8. The WwNP mapping is broadscale and indicative. Further investigation is required for any land shown to have potential for WwNP.

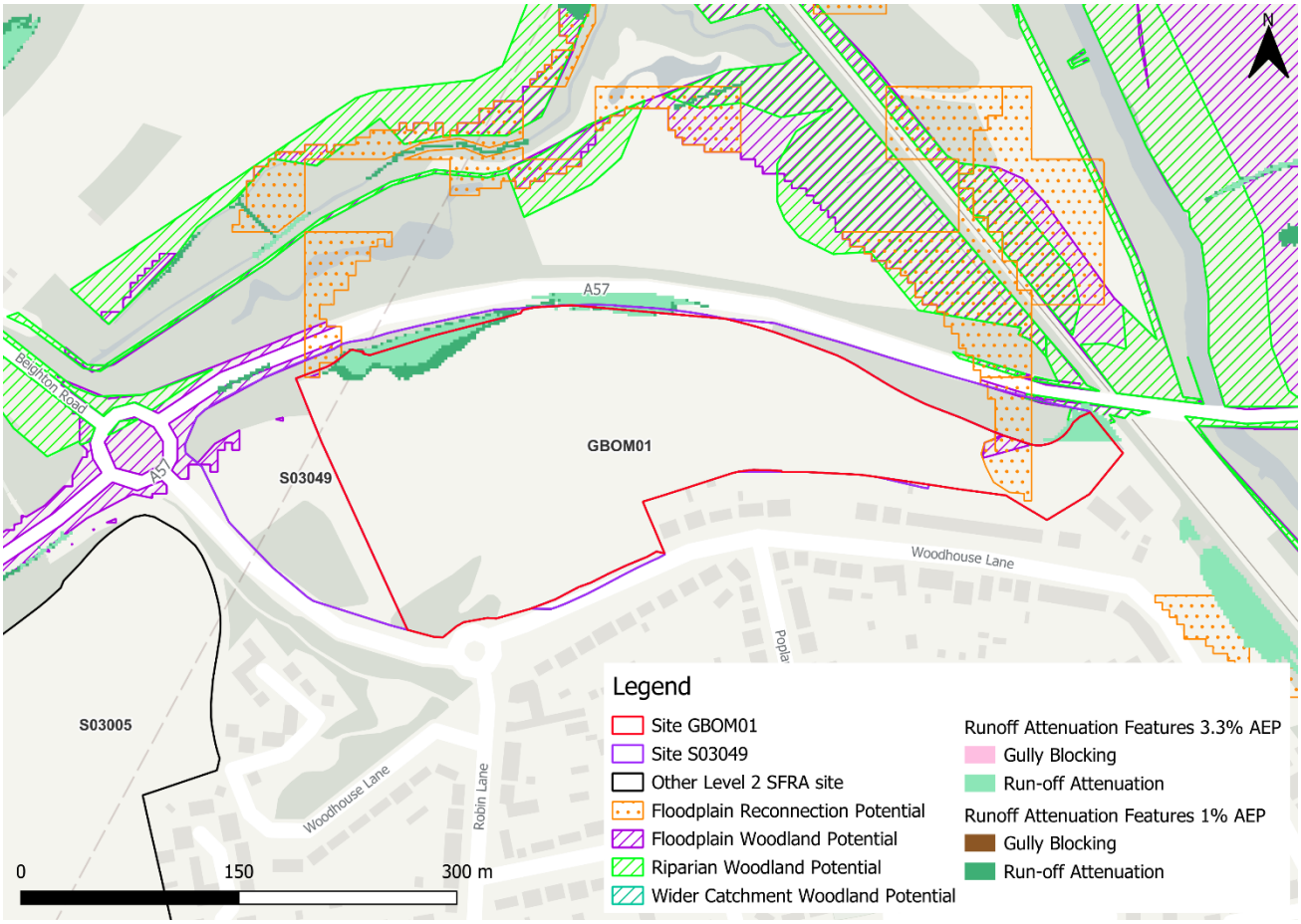

Figure 2-8: Natural Flood Management (NFM) potential mapping

2.4 Historic flood incidents

The EA's Historic Flood Map (HFM) has been considered and mapped in Figure 2-9 which shows the east of the site has been subject to flooding in the past. The Recorded Flood Outline (RFO) dataset indicates that these historic events occurred as a result of the channel capacity of the River Rother being exceeded in both November 2000 and November 2019.

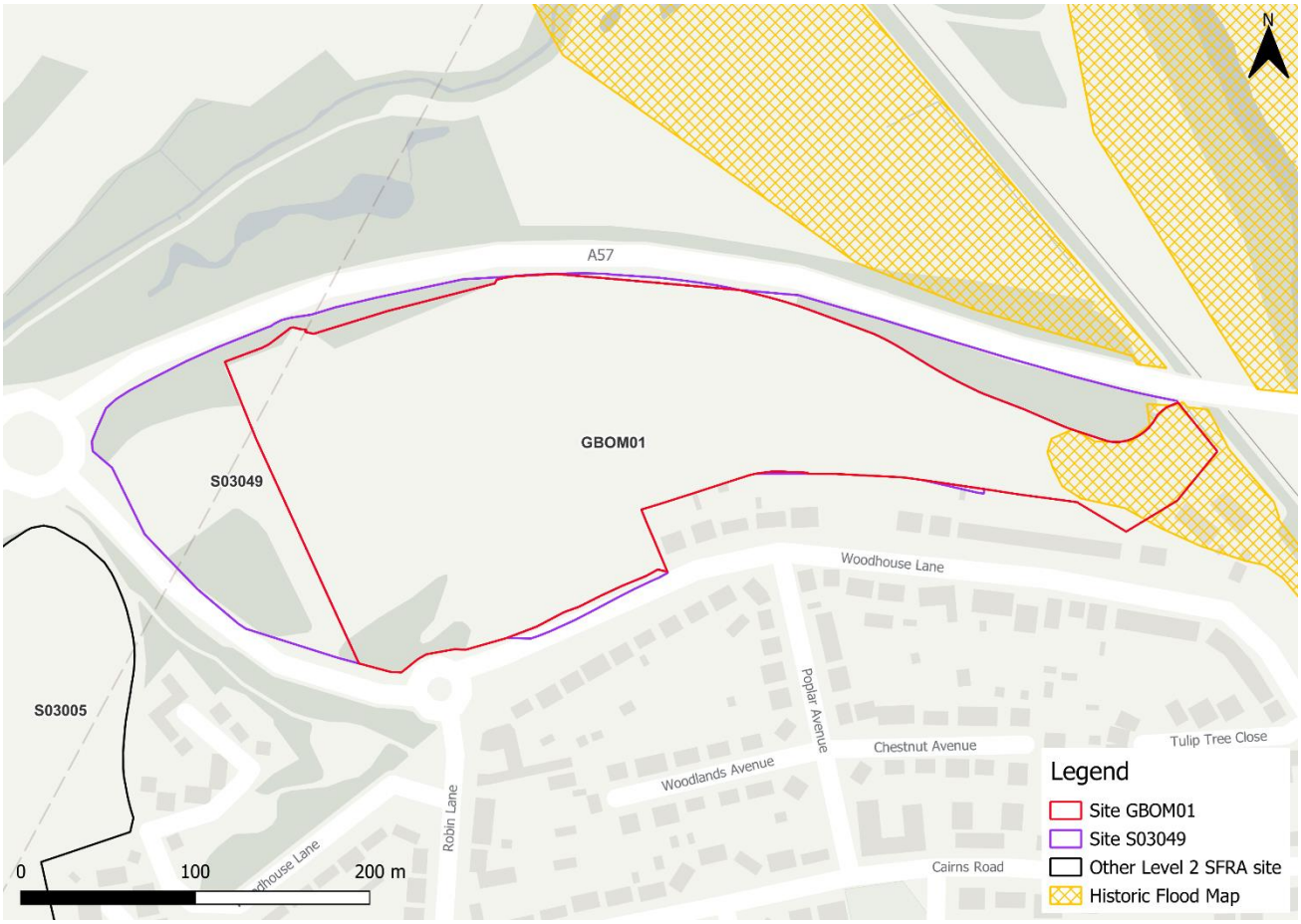

Figure 2-9: Recorded historic flood events onsite and around the site

2.5 Flood warning and access and escape routes

The EA operates a Flood Warning Service for properties located within a Flood Warning Area (FWA) for when a flood event is expected to occur. Site GBOM01 is partially located within a FWA, namely 123FWF709 - River Rother at Beighton.

Flood alerts may be issued before a flood warning for properties located within a Flood Alert Area (FAA) to provide advance notice of the possibility of flooding. A flood alert may be issued when there is less confidence that flooding will occur in a FWA. Both sites are also partially located within a FAA, namely 123WAF967 - Lower River Rother.

Based on available information, safe access and escape routes would likely be achievable via Woodhouse Lane to the south and Beighton Road to the west of the site during a fluvial flood event.

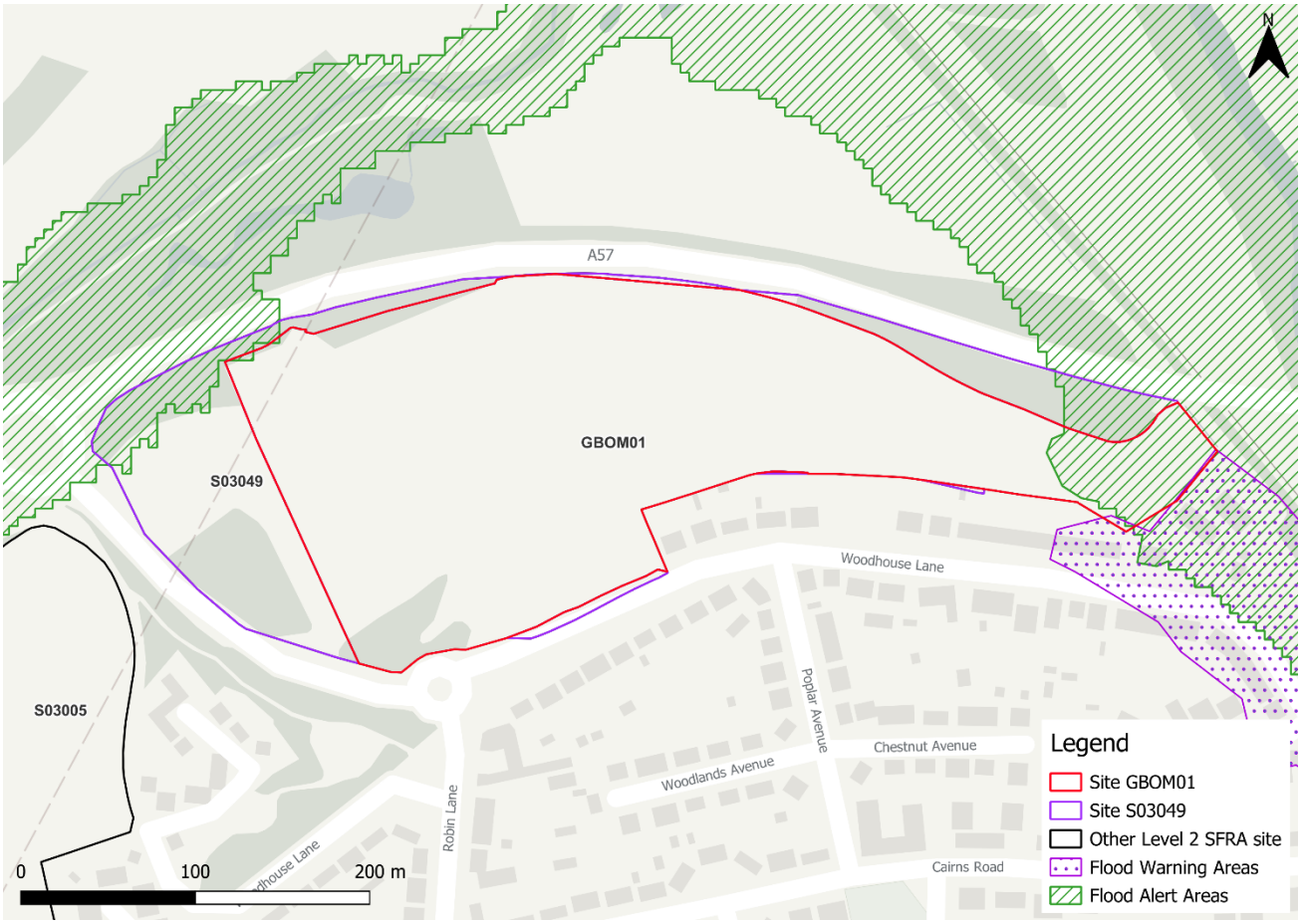

Figure 2-10: EA Flood Warning Areas and Flood Alert Areas

2.6 Observations, mitigation options and site suitability - fluvial

- The proposed development of the site would see a change in the risk classification from less vulnerable to more vulnerable, according to the NPPF.
- Given the change in use and therefore vulnerability of the site, the FRA must show that the development can be designed to be safe and that there is adequate emergency planning provision (para 014 FRCC-PPG).
- The site is modelled to be within the functional floodplain within the east of the site. Development is not permitted within the functional floodplain. This area should remain as open green space which can provide multifunctional benefits providing ecological, social and amenity value as well as flood risk management.
- The east of the site is also modelled to be at risk from fluvial sources (according to the Middle Lower Don 2015 undefended model) in the 1% AEP undefended scenario, to the same extent as Flood Zone 3a. The risk to the site in this event is from Shire Brook.
- Modelled undefended fluvial risk to the site from Shire Brook remains largely similar when accounting for climate change, with depths of >1.2 m covering the majority of the area at risk. The River Rother overtops the railway embankment to the east of the site in this event, therefore a small amount of increased risk is being contributed by the River Rother.

- Give both sites are proposed for more vulnerable uses and are within Flood Zone 3a, and also within the 1% AEP undefended event modelled flood outline, the site must be subject to and must pass the exception test.
- Any more vulnerable development should be sited outside of the 1% AEP plus climate change event flood extent. Ideally, all more vulnerable development would be directed to Flood Zone 1.
- Safe access and escape routes would likely be achievable via Woodhouse Lane to the south and Beighton Road to the west of the site during a fluvial flood event.
- EA flood warnings and alerts should continue to be in place to ensure early evacuation of site users before an extreme flood event occurs.

3 Flood risk from surface water

3.1 Existing risk

Based on the EA's national scale third generation Risk of Flooding from Surface Water (RoFSW) map (November 2023), surface water risk to both sites is predominantly very low. For GBOM01, approximately 5% of the site is at high surface water risk, a further 3% of the site is at medium risk and a further 6% is at low surface water risk, as shown in Table 3-1. For S03049, approximately 5% of the site is at high surface water risk, 2% at medium risk and a further 5% is at low surface water risk.

In the high risk event, surface water risk ~~in~~ is confined to two areas of ponding in topographic low spots within the east and north. These areas increase in extent and depth in the medium risk event. In the low risk event, a surface water flow path emerges along the northern boundary between the two sites, connecting the two areas of topographic ponding. However, these risk areas are contained within the fluvial risk areas and should be mitigated as part of fluvial risk considerations. There is a shallow flow path along Woodhouse Lane to the south of the site.

Greatest flood depths within the site in the medium risk event are significant, at > 1.2 m (Figure 3-1), with areas of hazard classified as significant (Figure 3-2). Safe access and escape routes are likely to be achievable via Woodhouse Lane to the south of the site and Beighton Road to the west in the high and medium risk events. Woodhouse Lane becomes inundated with depths of up to 0.3 m in the low risk event, therefore safe access and escape routes via Beighton Road may need to be made available for both sites.

Table 3-1: Existing surface water flood risk based on percentage area at risk using the RoFSW map

Site	Very low risk (% area)	Low risk (% area)	Medium risk (% area)	High risk (% area)
GBOM01	86	6	3	5
S03049	88	5	2	5

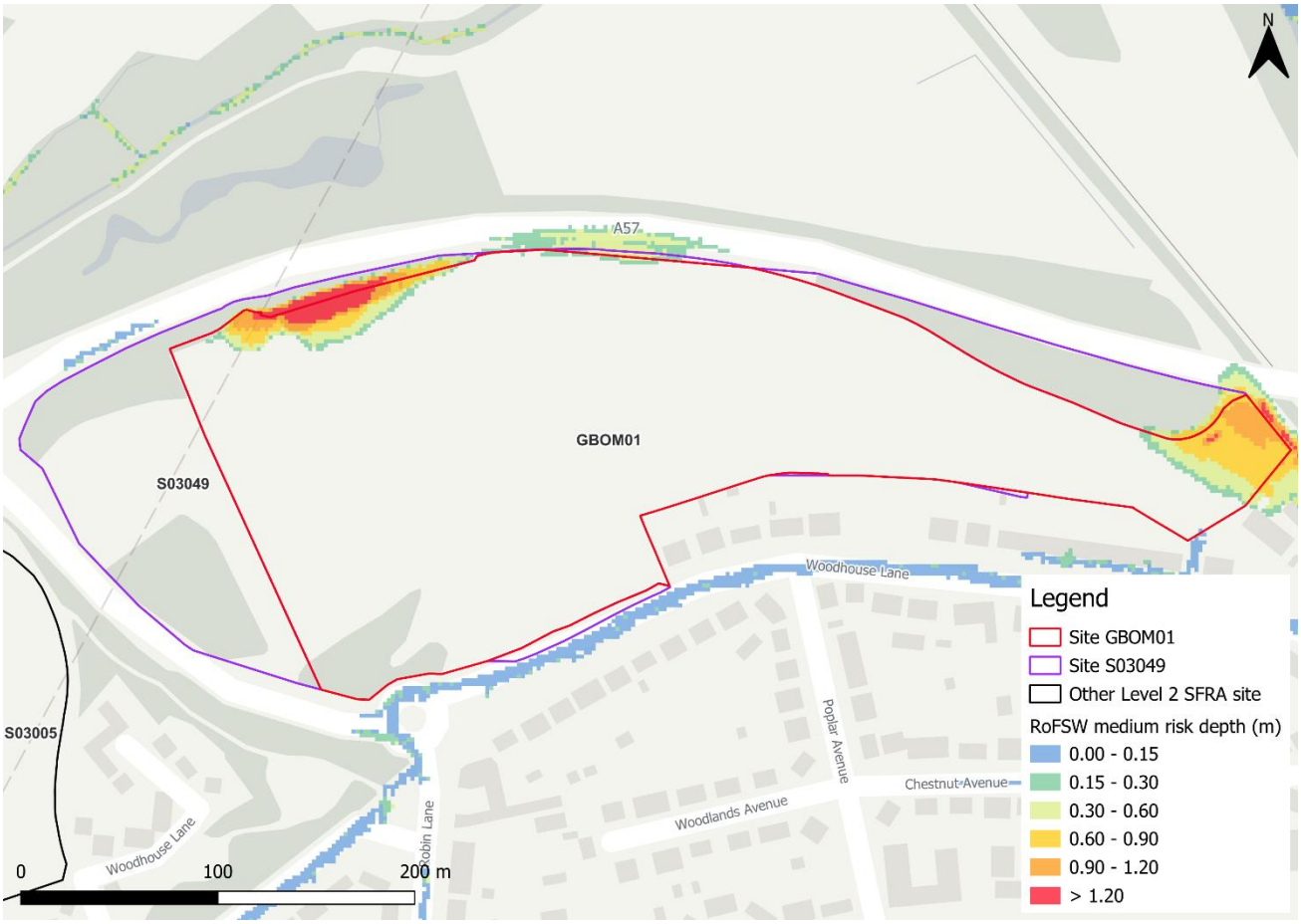

Figure 3-1: Medium risk event surface water flood depths (Risk of Flooding from Surface Water map)

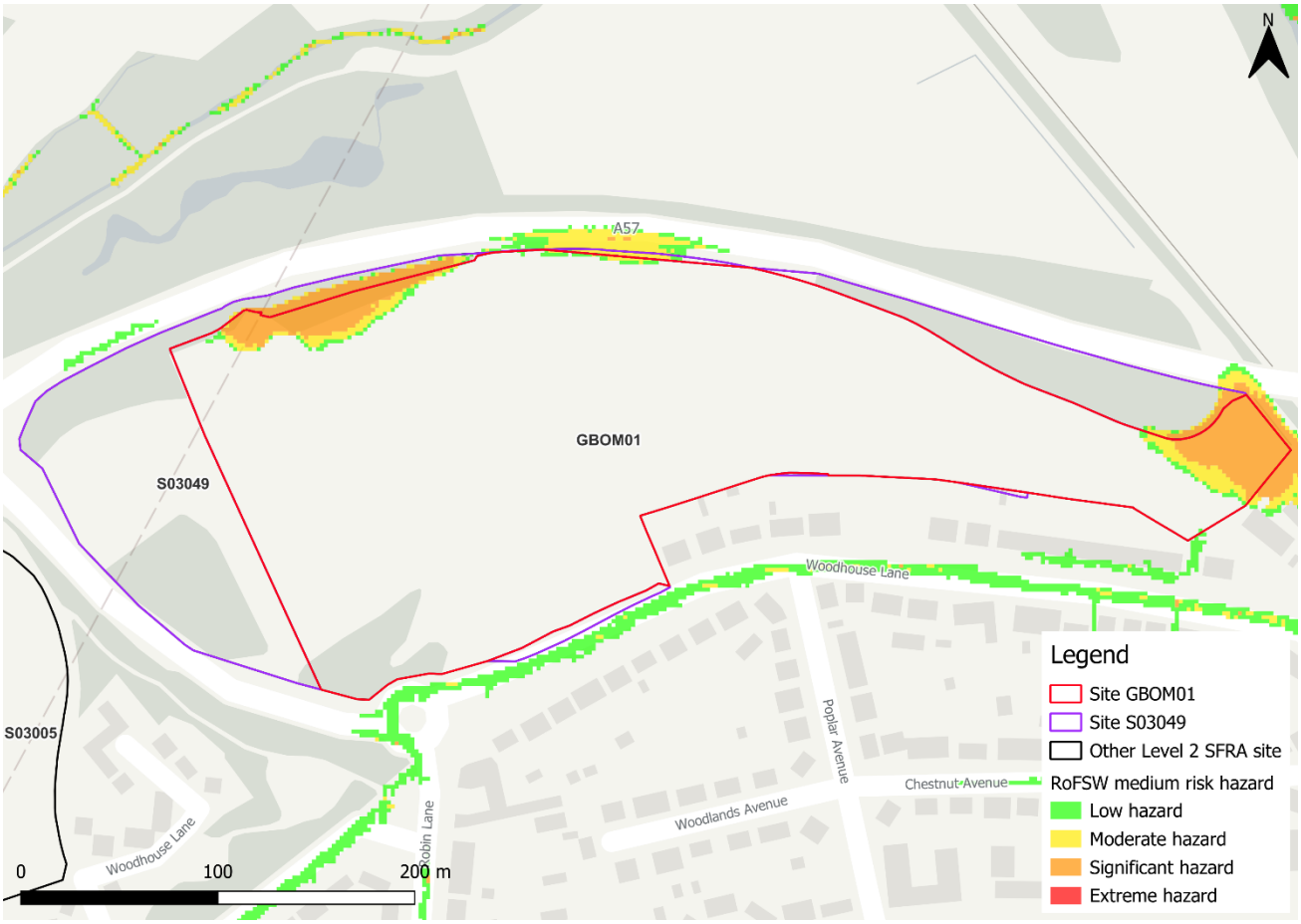

Figure 3-2: Medium risk event surface water flood hazard[2] (Risk of Flooding from Surface Water map)

3.2 Impacts from climate change

The impact of climate change on surface water flood risk has been modelled. This allows for direct comparison with the RoFSW map. With consideration of the EA's SFRA guidance, the latest climate change allowances have been modelled as shown in Table 3-2.

Table 3-2: Modelled climate change allowances for rainfall for the Don and Rother management catchment

Return period	Central allowance 2070s (% increase)	Upper end allowance 2070s (% increase)
3.3% (high risk)	25%	35%
1% (medium risk)	25%	40%

2 Based on Section 7.5 Hazard rating. What is the Risk of Flooding from Surface Water map? Report version 2.0. April 2019. Environment Agency

Figure 3-3 shows the modelled surface water flood depths for the medium risk event plus 40% climate change. Risk is modelled to be greater than for present day conditions, with the medium risk climate change event showing a similar level of risk to the present day low risk event, with additional short, shallow flow paths within the east of site GBOM01 and north of site S03049. Maximum depths are modelled to be > 1.2 m, with areas of hazard largely categorised as significant (Figure 3-4). Safe access and escape routes for both sites would likely be required via Beighton Road to the west of the site where flood depths are shallower.

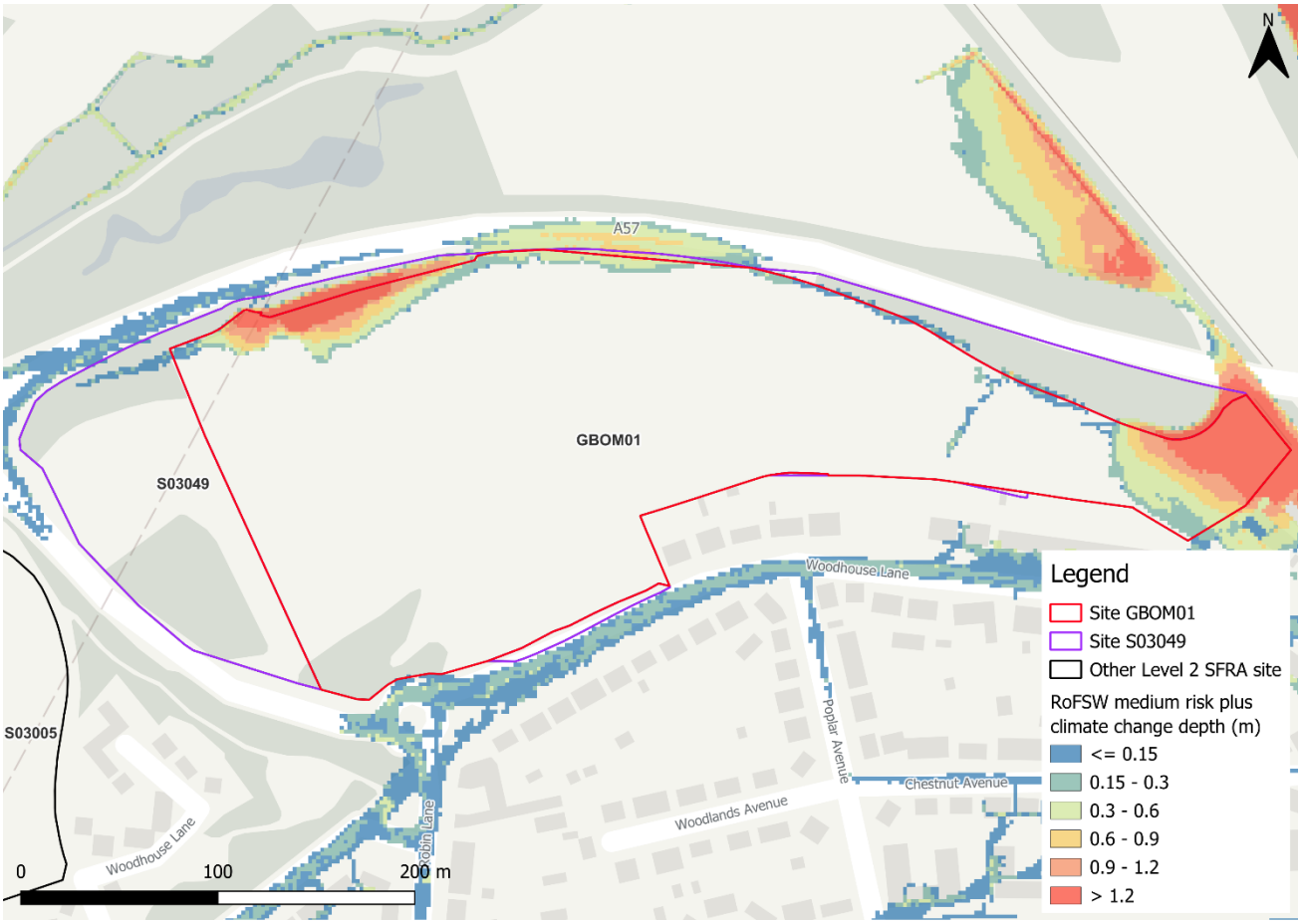

Figure 3-3: Medium risk event surface water flood depths plus 40% climate change (based on Risk of Flooding from Surface Water map)

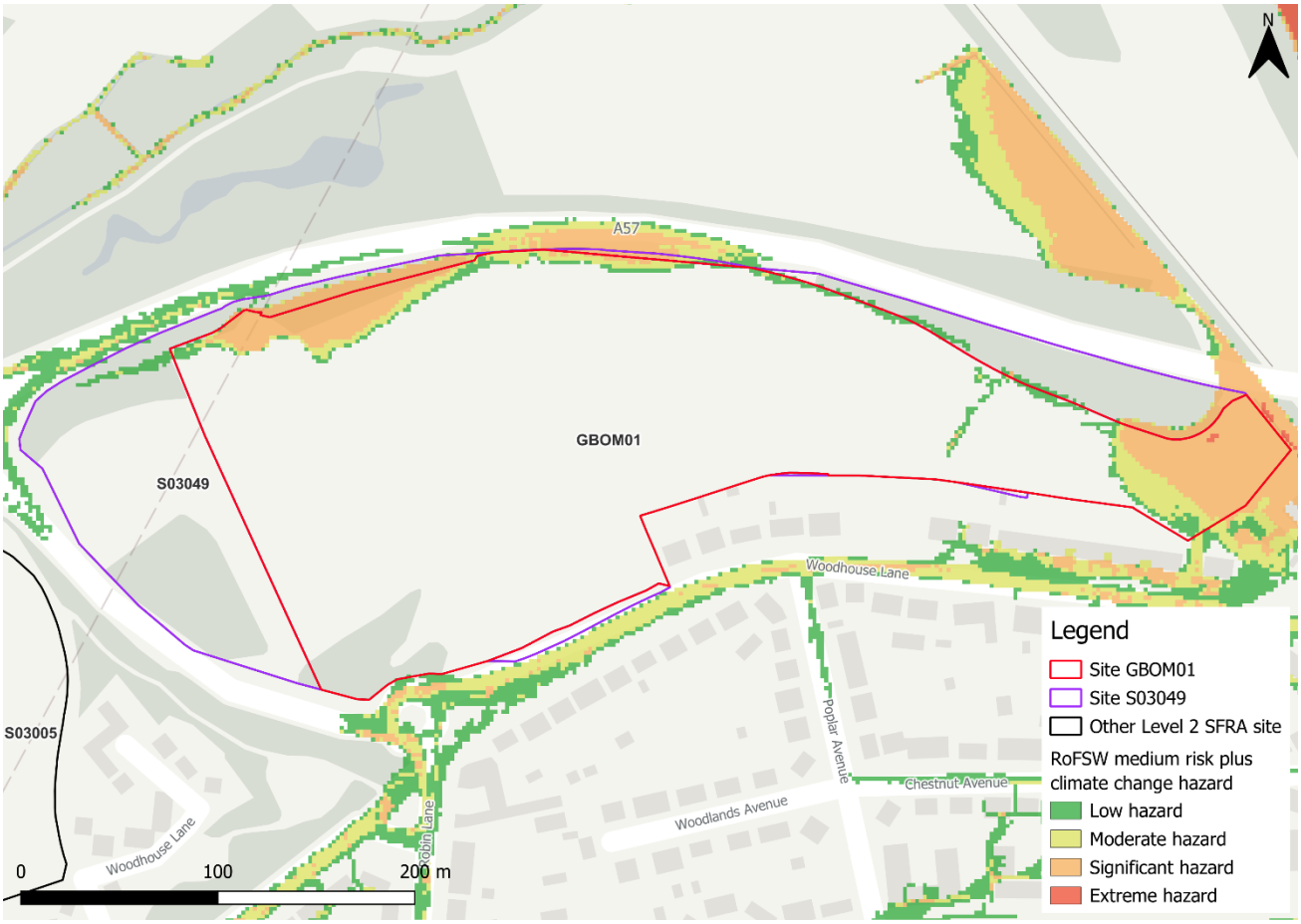

Figure 3-4: Medium risk event surface water flood hazards plus 40% climate change (based on Risk of Flooding from Surface Water map)

3.3 Risk of runoff from site post development

Runoff rates should not exceed current rates and if possible, betterment of existing rates should be aimed for. For the purposes of this assessment, the required volumes of attenuation have been calculated below based on the estimated impermeable area (assumed 85% of site area where this information was not available) and limiting greenfield runoff rate of Qbar (l/s).

Table 3-3: Surface water flood risk from proposed development for site GBOM01

Design flood event (incl climate change)	Critical storm duration Hrs	Inflow volume m^3	Outflow volume m^3	Attenuation required m^3	Time to empty (assuming no infiltration) Hrs	Total storage required: Area (Ha) and % of site area
30yr Rainfall+25%	12	3807	382	3424	107.2	0.23 Ha 3.5%
30yr Rainfall+35%	12	4111	382	3729	116.7	0.25 Ha 3.9%
100yr Rainfall+25%	12*	9189	3822	5367 (1943 exceedance storage)	168.0	0.36 Ha 5.6%
100yr Rainfall+40%	12*	10292	3822	6470 (2741 exceedance storage)	202.5	0.43 Ha 6.7%
Surface water flood risk impacts from development site, mitigation & SuDS options	As part of this Level 2 SFRA we have included calculations to provide an estimated land take if a pond with an assumed depth of 1.5m was included as part of the development. Attenuation volumes are presented for the critical storm duration for the 3.33% AEP event with exceedance flows quantified up to the 1% event. To prevent development worsening flood risk elsewhere, surface water runoff must be managed on site.					
*critical storm duration limited to 12 hours						

Note: Proposed development limiting runoff rate: (l/sec). Qbar (FEH Statistical) – 12.64, Q30 – 22.13, Q100 – 26.30.

Table 3-4: Surface water flood risk from proposed development for site S03049

Design flood event (incl climate change)	Critical storm duration Hrs	Inflow volume m^3	Outflow volume m^3	Attenuation required m^3	Time to empty (assuming no infiltration) Hrs	Total storage required: Area (Ha) and % of site area
30yr Rainfall+25%	12	1493	151	1342	106.2	0.09 Ha 4.7%
30yr Rainfall+35%	12	1612	151	1461	115.6	0.10 Ha 5.1%
100yr Rainfall+25%	12*	3604	1512	2092 (750 exceedance storage)	165.6	0.14 Ha 7.3%
100yr Rainfall+40%	12*	4037	1512	2525 (1063 exceedance storage)	199.8	0.17 Ha 8.8%
Surface water flood risk impacts from development site, mitigation & SuDS options	As part of this Level 2 SFRA we have included calculations to provide an estimated land take if a pond with an assumed depth of 1.5m was included as part of the development. Attenuation volumes are presented for the critical storm duration for the 3.33% AEP event with exceedance flows quantified up to the 1% event. To prevent development worsening flood risk elsewhere, surface water runoff must be managed on site.					
*critical storm duration limited to 12 hours						

Note: Proposed development limiting runoff rate: (l/sec). Qbar (FEH Statistical) – 3.75 (assume 5l/s minimum discharge), Q30 – 6.56, Q100 – 7.80.

3.4 Observations, mitigation options and site suitability - surface water

- Current risk to both sites is predominantly very low. Surface water risk in the medium risk event is largely confined to east of site and the shared northern boundary of the sites. Safe access and escape routes would likely be achievable via Beighton Road in all events.
- Topographic flow paths and depressions should be considered and included in site design and ideally left in place to flood naturally when required. Any regrading of land must include for like for like volumes to ensure risk is contained safely onsite for the lifetime of development.
- For the 1% AEP event plus 40% climate change, approximately 6.7% of the total area of site GBOM01 would be required for flood storage based on a 1.5m deep pond to ensure runoff volumes do not exceed existing rates. For site S03049, approximately 8.8% of the total area of the site would be required.
- A full drainage strategy would be required to ensure there is no increase in surface water flood risk elsewhere as a result of new development. This will

require surface water modelling based on layout plans and detailed design and consultation with the LLFA.

- The NaFRA2 release of the RoFSW should be considered at the FRA stage.
- Note, the RoFSW map is not suitable for identifying whether an individual property will flood and is therefore indicative. The RoFSW map is not appropriate to act as the sole evidence for any specific planning or regulatory decision or assessment of risk in relation to flooding at any scale without further supporting studies or evidence.

4 Risk from groundwater

Risk of groundwater emergence is assessed in this SFRA using JBA's 5m Groundwater Emergence Map. This dataset is recommended for use by the EA in the SFRA Good Practice Guide[3]. Figure 4-1 shows the map covering these sites and the surrounding areas and Table 4-1 explains the risk classifications.

Risk of groundwater emergence across both sites is varied. The majority site GBOM01 is in an area where there is no risk of groundwater emergence. Groundwater conditions may therefore be suited to infiltration SuDS in these areas.

Within the southwest of site GBOM01 and the majority of S03049, there is a risk of groundwater flooding to surface and subsurface assets. Ground survey, including percolation testing, may be required to fully ascertain groundwater conditions in these areas at the FRA stage.

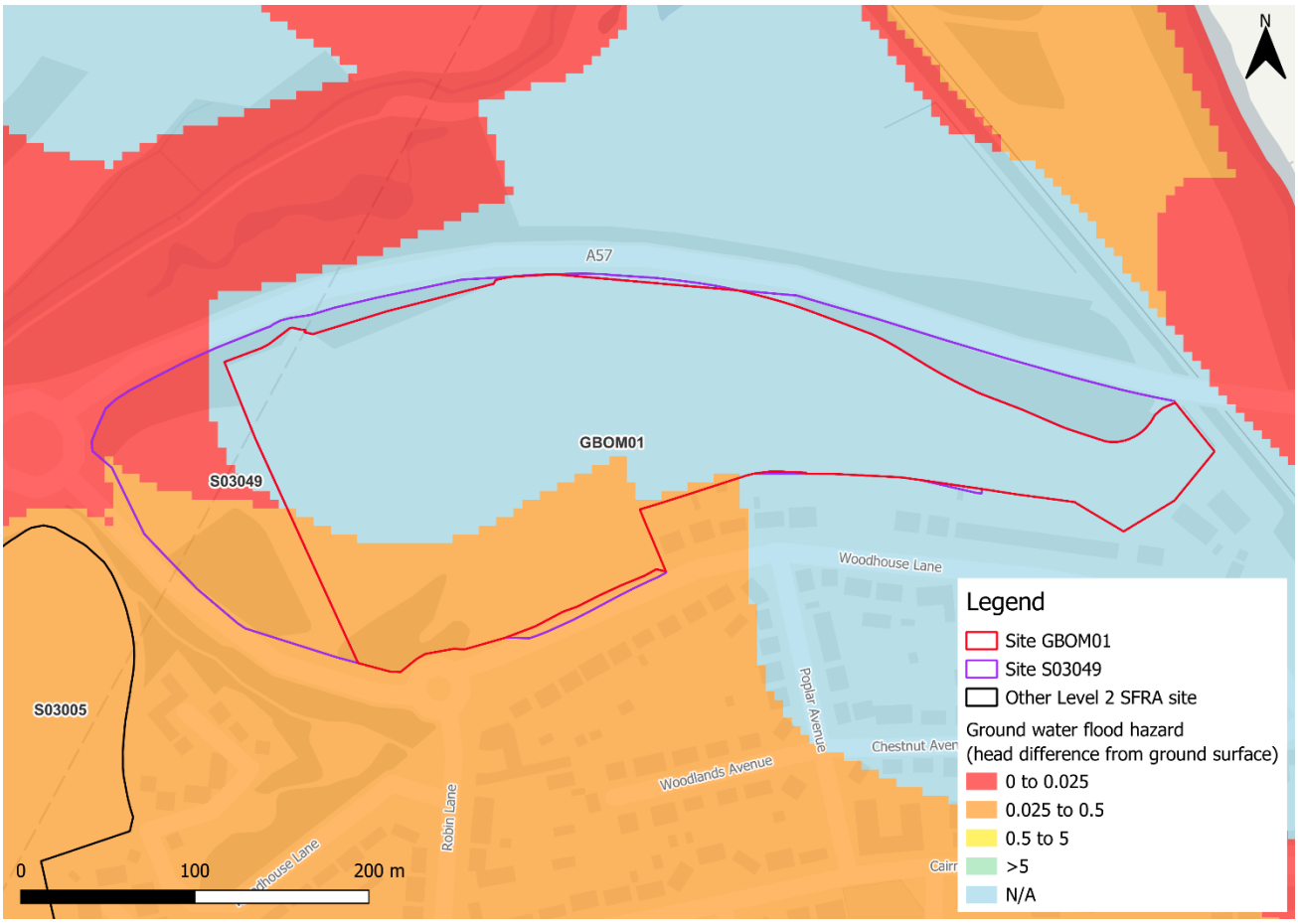

Figure 4-1: JBA 5m Groundwater Emergence Map

3 Strategic flood risk assessment good practice guide. ADEPT. December 2021.

Table 4-1: Groundwater Hazard Classification

Groundwater head difference (m)*	Class label
0 to 0.025	Groundwater levels are either at very near (within 0.025m of) the ground surface in the 100-year return period flood event. Within this zone there is a risk of groundwater flooding to both surface and subsurface assets. Groundwater may emerge at significant rates and has the capacity to flow overland and/or pond within any topographic low spots.
0.025 to 0.5	Groundwater levels are between 0.025m and 0.5m below the ground surface in the 100-year return period flood event. Within this zone there is a risk of groundwater flooding to surface and subsurface assets. There is the possibility of groundwater emerging at the surface locally.
0.5 to 5	Groundwater levels are between 0.5m and 5m below the ground surface in the 100-year return period flood event There is a risk of flooding to subsurface assets, but surface manifestation of groundwater is unlikely.
>5	Groundwater levels are at least 5m below the ground surface in the 100-year return period flood event. Flooding from groundwater is not likely.
N/A	No risk. This zone is deemed as having a negligible risk from groundwater flooding due to the nature of the local geological deposits.
*Difference is defined as ground surface in mAOD minus modelled groundwater table in mAOD.	

5 Residual risk

5.1 Shire Brook railway culvert blockage

There is potential residual risk to the site from a blockage of the culvert beneath the railway along Shire Brook to the north of the site. The Middle Lower Don River Rother (2015) model includes Shire Brook as an inflow, with no model representation of the structures along the watercourse. Therefore, the impact to the site of a blockage at this location could not be assessed.

5.2 Rotherham Road bridge blockage

Figure 5-1 shows the modelled flood depths in the event of a blockage of the Rotherham Road bridge at NGR 444516, 384150. The modelled event represents the undefended 1% AEP event +38% for climate change. There is a similar level of risk to the site in the bridge blockage scenario in comparison to the baseline scenario. Given the structure is approximately 20m in width, a 75% blockage (as modelled in this scenario) is unlikely to occur.

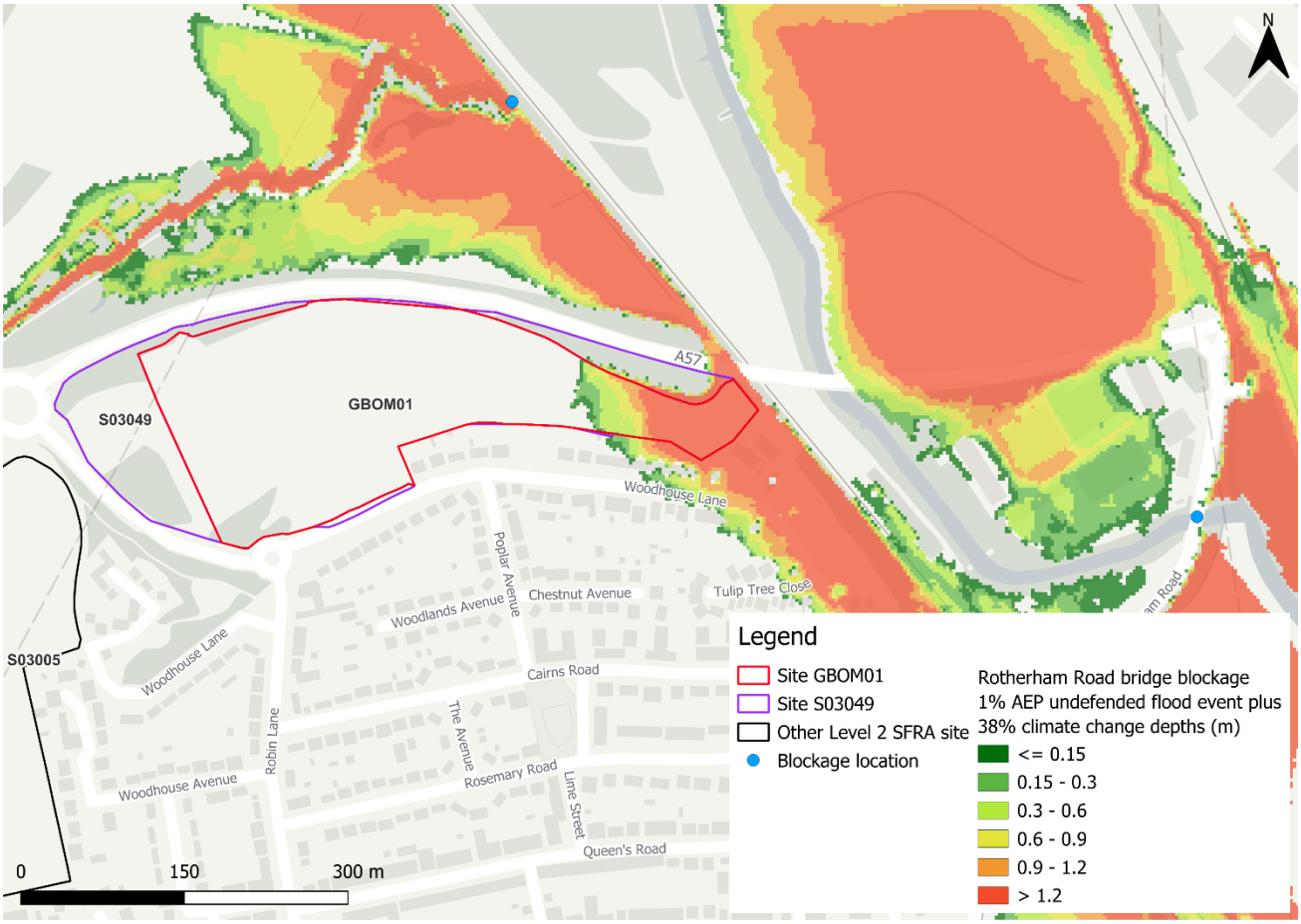

Figure 5-1: Rotherham Road culvert blockage depths (based on a 1% AEP plus higher central climate change undefended event)

5.3 Flood risk from reservoirs

The EA's Reservoir Flood Maps (RFM) (2021) show where water may go in the unlikely event of a reservoir or dam failure. Figure 5-2 shows the RFM in a 'dry day' and 'wet day' scenario. A 'dry day' scenario assumes that the water level in the reservoir is the same as the spillway level or the underside of the roof for a service reservoir and the watercourses upstream and downstream of the reservoir are at a normal level. A 'wet day' scenario assumes a worst-case scenario where a reservoir releases water held on a 'wet day' when local rivers have already overflowed their banks.

Both sites are potentially at risk from one reservoir, namely Rother Valley Country Park (Main Lake). This is located within Rotherham and operated by Rotherham Metropolitan Borough Council.

The EA's SFRA guidance states that where a proposed development site is at flood risk from a reservoir, then an assessment into whether the reservoir design or maintenance schedule needs improving should be carried out. Expert advice may be required from an all-reservoirs panel engineer. The Council should consult Rotherham Metropolitan Borough Council to ascertain whether the proposed development could affect the reservoir's risk designation, it's design category or how it is operated. The Council, as category 1 responders, can access more detailed information about reservoir risk and reservoir owners using the Resilience Direct system.

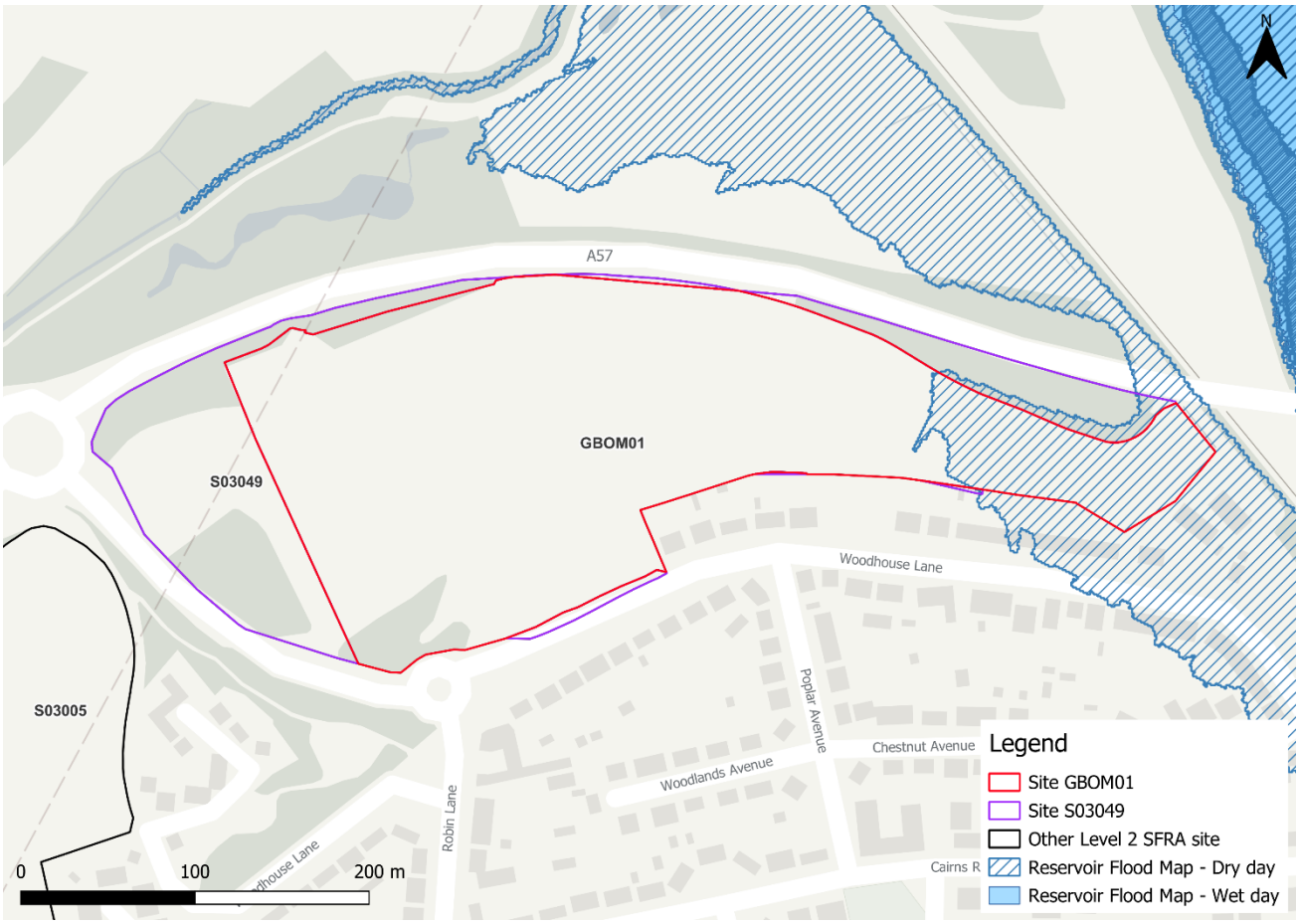

Figure 5-2: Flood risk from reservoirs

5.4 Observations, mitigation options and site suitability - residual risk

- There is potential residual risk from a blockage of the culvert beneath the railway along Shire Brook. It is recommended that any site-specific FRA assesses the impact of a potential blockage to the site.
- Given the potential reservoir risk to the site, developers should consider[4]:
  - The potential loss of life and damage to buildings in the event of dam failure,
  - Whether emergency drawdown of the reservoir (reducing the water level) will add to flooding,
  - Consulting with relevant reservoir owners to assess if the design or maintenance of the reservoir would need improving, and whether development could affect the operation of the reservoir and impact on the reservoir category, and
  - Consulting with the local resilience forum for advice on emergency planning.

4 Reservoir flood maps: when and how to use them | Environment Agency | 2021

6 Overall site assessment

6.1 Can part b) of the exception test be passed?

Both sites are required to pass part b) of the exception test[5], given they are proposed for more vulnerable uses and are located within Flood Zone 3a. It must be proven that development can be safe for its lifetime, which is 100 years for residential development. Based on the available information documented within this Level 2 SFRA, it should be possible for both sites to pass the exception test if the isolated area at fluvial risk in the east of the sites remains free of more vulnerable development, accounting for climate change.

6.2 Recommendations, FRA requirements, and further work

Based on the evidence presented in the Level 1 SFRA (2022) and this Level 2 SFRA:

- There should be no development within the functional floodplain that is present within the east of both sites. Development should also avoid Flood Zone 3a whilst accounting for climate change given the significant modelled flood depths and hazards.
- It should be appropriate to develop both sites for more vulnerable purposes given the majority of the site area is within Flood Zone 1. All more vulnerable development should be directed to Flood Zone 1.
- There is potential residual risk to the site from a blockage of the culvert beneath the railway along Shire Brook. This risk should be considered as part of a site-specific FRA which will involve new modelling.
- Groundwater conditions within some areas of the site should be investigated further as part of a site-specific FRA. This may need to include for ground survey, including percolation testing to fully ascertain groundwater conditions at the site.
- Any FRA should be carried out in line with the latest versions of the NPPF; FRCC-PPG; EA online guidance; the SCC Local Plan and national and local SuDS policy and guidelines.
- Throughout the FRA process, consultation should be carried out with the following, where applicable, the local planning authority; the lead local flood authority; emergency planning officers; the Environment Agency; Yorkshire Water; the highways authorities; and the emergency services.

5 Para 178 National Planning Policy Framework 2024

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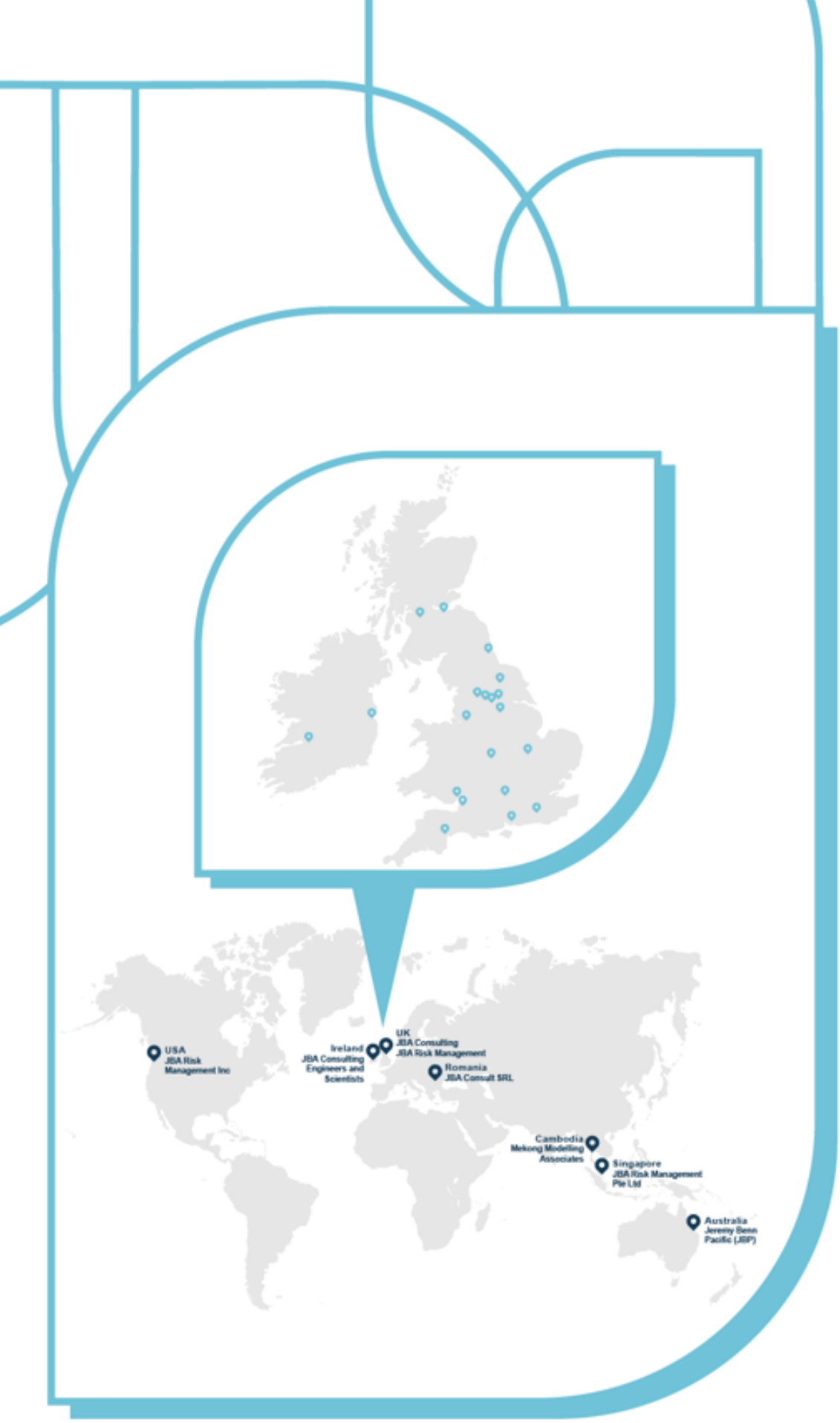

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