FLOOD RISK TECHNICAL NOTE

VICARAGE ROAD, WILPSHIRE

Client: Mrs Riding
DART Job No.: 261005
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Revision: P02
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Prepared by: DART Engineers Ltd

1 INTRODUCTION AND SCOPE

This site-specific Flood Risk Assessment Technical Note supports the outline planning application to Ribble Valley Borough Council for demolition of a redundant water tower and valve house and erection of a self-build dwelling at land off Vicarage Road, Wilpshire, BB1 9HY. It responds to the surface water flood risk issue described in Gary Hoerty Associates' email of 20 October 2026.

The supplied mapping indicates Flood Zone 1 and a localised surface water constraint within the residential plot, together with flooding on the approach road. This revision assesses the updated site layout and present-day and climate change overlays dated 23 October 2026. The revised dwelling position appears clear of the mapped surface water feature. Road flooding and the stated depth of less than 300 mm are addressed expressly in Section 6.1 and the conclusion.

This is a proportionate desktop assessment for the outline application. It includes flood risk design requirements but excludes infiltration testing, a calculated drainage strategy and hydraulic modelling. It does not replace separately requested drainage validation information. The Council's invalidation notice has not been supplied; the validation issue is understood from the agent's email.

2 SITE AND PROPOSALS

The plans show a narrow triangular residential plot west of the railway, with a narrow access extending south to Vicarage Lane beside The Glen. The water tower and valve house lie in the blue-outlined land north of the red-outlined residential plot. The works and assessment therefore distinguish the dwelling plot and access from the separate demolition area.

The revised overlays, reference Rid.1216.3795.GH, show a 15 m x 10 m dwelling footprint in the northern part of the residential plot, a separate 6 m x 6 m double garage for two cars, two external parking spaces and a connecting drive. The garage is west of the drive. The dwelling and garage appear outside the mapped flood shading on both supplied overlays. No surveyed levels, threshold levels, drainage details or basement are shown.

The job is titled Vicarage Road as instructed. Both architect's drawings identify the address as land off Vicarage Lane, Wilpshire. This note concerns that same site.

3 INFORMATION AND PLANNING CONTEXT

The assessment uses Gary Hoerty Associates' location plan Rid.1216.3795-01 and original site plans Rid.1216.3795-02 (9 October 2026), four supplied Environment Agency screenshots, the agent's email of 20 October 2026, and revised V2 surface water overlays dated 23 October 2026, reference Rid.1216.3795.GH, labelled PRESENT DAY and WITH CLIMATE CHANGE. The revised overlays supersede the earlier indicative layout for this assessment and are included in Appendix B. The instructing engineer advises that pluvial flooding on the approach road is less than 300 mm deep.

A dwelling is a More Vulnerable use. The national flood zone compatibility approach permits this use in Flood Zone 1 without the river and sea Exception Test. A new dwelling is not a householder extension and self-build status does not itself exempt it from flood risk assessment.

National policy requires a proportionate FRA where Flood Zone 1 land is identified as at risk from other sources. The surface-water-only exemption from the Sequential Test depends on demonstrating lifetime safety and no increase in risk elsewhere. It should not be assumed solely from Flood Zone 1 status. The preferred approach here is to keep buildings and vulnerable access outside the flow route and demonstrate the effectiveness of that arrangement. The Council determines whether the submitted evidence satisfies the applicable exemption or requires further Sequential Test information.

4 FLOOD MAP FINDINGS

River and sea flooding: the supplied present-day Flood Zone image shows no Flood Zone 2 or 3 shading across the selected plot or immediate approach. This is consistent with Flood Zone 1, meaning a river or sea flooding probability below 0.1% in any year. It does not describe surface water risk. The screenshot selection does not include all blue-outlined demolition land and is not a formal georeferenced boundary check.

Surface water flooding: all three supplied depth maps explicitly show present-day conditions. In the 1 in 30 annual probability event (approximately 3.3% AEP), no clear internal flood patch is apparent within the main triangular plot. Flooding is mapped along Vicarage Lane west of the access and within the railway corridor.

In the 1 in 100 event (1% AEP), a localised patch extends from the western boundary into the upper part of the residential plot. The 1 in 1000 event (0.1% AEP) shows a broader connected feature extending into the plot, with additional flooding along its western margin and the approach road. The feature is interpreted as a potential overland flow route or ponding area; its actual direction and connectivity require levels to confirm.

The revised overlays place the dwelling east of the local surface water feature, with the garage and principal private drive also appearing clear of shading. The climate change overlay shows a larger affected area within the western/central garden and more extensive road flooding. Neither overlay includes a depth legend, annual probability or climate change epoch/allowance. They support a visual layout assessment; they do not independently verify the stated road depth, a numerical flood level or a calculated access hazard. Survey and source-map checks remain necessary for detailed design.

5 FLOOD RISK MITIGATION

5.1 Layout and flow routes. Adopt the revised layout in Appendix B as the indicative arrangement. Retain the mapped surface water affected western/central garden as an open landscaped flow corridor between the western boundary and the dwelling/drive. The dwelling and double garage appear clear of the shading in both overlays. Verify their clearance, including foundations, terraces and any raised access, against survey and design-event data allowing for climate change and map uncertainty.

Preserve the existing entry, conveyance and exit of overland water. Do not obstruct the corridor with fill, retaining walls, solid boundary walls, close-boarded fencing or stored materials. Maintain the effective flow width and storage. Any proposed swale or local regrading must be checked to show it can convey the relevant runoff without raising flood levels or diverting water onto adjoining houses, the access, the railway or neighbouring land.

5.2 Levels. Obtain a topographical survey tied to Ordnance Datum covering the plot, western boundary flow feature, access and connection to Vicarage Lane. Establish the surface water design flood level from suitable depth data and surveyed levels for the 1% AEP event with climate change. Specify the dwelling floor level above that level with an agreed freeboard; a 600 mm freeboard is recommended as the initial design allowance, subject to a justified site-specific agreement with the Council.

Also provide positive drainage away from external walls and a local threshold upstand where practicable. Reconcile accessible entrances with the flood protection level through a graded approach and drainage detail. A nominal upstand above surrounding ground does not establish the required flood freeboard. No absolute finished floor level can be substantiated from the supplied level-free plans.

5.3 Construction and resilience. Avoid basements and sunken habitable accommodation. Locate electrical equipment and vulnerable services above the adopted flood protection level. Detail wall and floor junctions and service penetrations to resist water ingress and use resilient materials where residual exposure remains. These measures supplement avoidance of the flow route.

5.4 Climate change. Assess a minimum 100-year residential lifetime, extending beyond 2125 if occupied after 2026. Apply the relevant Environment Agency upper-end peak rainfall allowance for the 2070s epoch to the 1% and 3.3% AEP events, with the approach to the period beyond 2125 agreed with the Council. No catchment-specific percentage has been assumed here.

The supplied WITH CLIMATE CHANGE overlay is now included in the layout appraisal. Confirm its source event, epoch and allowance against the residential design lifetime before fixing levels. The present-day 0.1% AEP map remains an additional residual-risk screen, not a substitute for the 1% AEP event with climate change. Further modelling is only needed if source data and survey cannot resolve design levels, flow routes or access hazard.

6 ACCESS AND OTHER FLOOD SOURCES

6.1 Access. The site is approached from Vicarage Lane beside The Glen. The revised overlays show the principal private drive largely clear of mapped flooding, but show pluvial flooding on the public road. The instructing engineer advises that the affected road depth is less than 300 mm. On that stated basis, road flooding does not itself demonstrate that access is severed: access remains possible in principle, subject to the depth and hazard checks below.

A depth below 300 mm is not an automatic safe-access threshold. Planning Practice Guidance allows limited flooding of access routes where safety is demonstrated, taking account of velocity and debris. Confirm the stated depth along the whole route to a safe destination for the 1% AEP event with climate change, together with velocity, debris, duration and pedestrian and emergency vehicle requirements. The supplied overlays have no depth legend or velocity data, so unrestricted safe passage during flooding is not certified. Retain an unobstructed route, avoid directing runoff onto it, and provide an occupier flood response plan, including early evacuation where practicable and refuge above the design level. Do not rely on walking or driving through hazardous floodwater or railway land as an escape route.

6.2 Groundwater. No groundwater monitoring, intrusive investigation or groundwater flood mapping has been supplied. Shallow perched water and local seepage cannot be excluded. Avoid basement development and check groundwater conditions when designing foundations and any infiltration drainage.

6.3 Sewers and artificial sources. No sewer records, capacity information, reservoir inundation mapping or confirmed flood history has been supplied. These sources are not identified as the cause of the validation query, but cannot be certified as absent. Confirm relevant local flood records with the applicant and Council, and check reservoir mapping and existing drainage records before final design. Existing mains associated with the redundant water structures must be identified, isolated and decommissioned safely.

6.4 Railway and ordinary drainage. Flooding mapped along the railway must not be assumed hydraulically isolated from the plot without checking levels and boundary drainage. Do not discharge runoff to railway land or alter railway drainage without agreement. Identify any ditches, pipes or culverts affected by access or demolition works and retain their capacity; obtain any necessary consent for alterations.

7 SURFACE WATER DRAINAGE

Provide separate foul and surface water systems. Assess runoff from the full proposed roof and paved areas against the actual existing drainage condition; demolition elsewhere on the holding does not automatically offset new runoff from the dwelling plot.

Apply the drainage hierarchy, testing infiltration feasibility before relying on soakaways. Where proposed, undertake representative BRE 365 infiltration testing and assess groundwater separation, slope stability and proximity to buildings, boundaries and the railway. If infiltration is unsuitable, establish a lawful alternative outfall and any necessary discharge permission.

The drainage design should manage the 1% AEP rainfall event with the applicable climate change allowance, address exceedance and blockage, and demonstrate no increased off-site flood risk. Keep external overland flow separate from ordinary roof drainage unless the system is designed for both. Provide ownership, inspection and maintenance arrangements. This note contains no tested infiltration rate, attenuation volume, discharge rate or agreed outfall and does not constitute the separately requested drainage strategy.

8 CONCLUSION AND PLANNING REQUIREMENTS

The supplied Environment Agency mapping is consistent with Flood Zone 1. The revised site layout dated 23 October 2026 places the dwelling and double garage outside the surface water shading on both the present-day and climate change overlays. The remaining mapped feature is within the western/central garden and should be retained as an unobstructed flow corridor. The revised arrangement therefore provides an engineering basis for progressing a single dwelling in principle, with appropriate levels and drainage.

Surface water flooding on Vicarage Lane is expressly recognised. The principal private access appears largely clear on the overlays and, on the stated road flooding depth of less than 300 mm, access remains possible in principle. Shallow road flooding is not, by itself, a reason to conclude the development is inaccessible or unacceptable. Safe access nevertheless depends on velocity, debris and route conditions as well as depth; less than 300 mm must not be treated as an unconditional safety threshold.

Carry the revised layout and Sections 5 to 7 into the detailed proposals: preserve the flow corridor, agree design flood and floor levels, and verify the whole access route in the 1% AEP event with climate change. The road depth is supplied information rather than independently verified from the legend-free overlays. Resolve any access hazard affecting development feasibility before determination; detailed design and management measures should not be used to defer an unresolved matter of principle.

This technical note provides the requested proportionate FRA evidence for consideration with the outline application. Acceptance for validation remains with Ribble Valley Borough Council. The Council may separately require infiltration evidence and a sustainable drainage strategy, as identified in the agent's email; those items are outside this note and remain to be supplied if requested.

9 REFERENCES

Gary Hoerty Associates, drawings Rid.1216.3795-01 and -02, 9 October 2026; email from Gary Hoerty to Andrew Dyson, 20 October 2026. Revised V2 overlays: Rid.1216.3795.GH, PRESENT DAY and WITH CLIMATE CHANGE, 23 October 2026. Road depth below 300 mm: information supplied by the instructing engineer for this revision.

Environment Agency, four supplied Flood Map for Planning screenshots: Flood Zones and present-day surface water depths for 1 in 30, 1 in 100 and 1 in 1000 annual probabilities. Screenshot capture dates are not independently verified.

MHCLG, National Planning Policy Framework, Chapter 18, policies F4 to F8. https://www.gov.uk/guidance/national-planning-policy-framework-chapter-18-managing-flood-risk-and-coastal-change-f1-9

Environment Agency, Preparing a flood risk assessment: standing advice. https://www.gov.uk/guidance/preparing-a-flood-risk-assessment-standing-advice

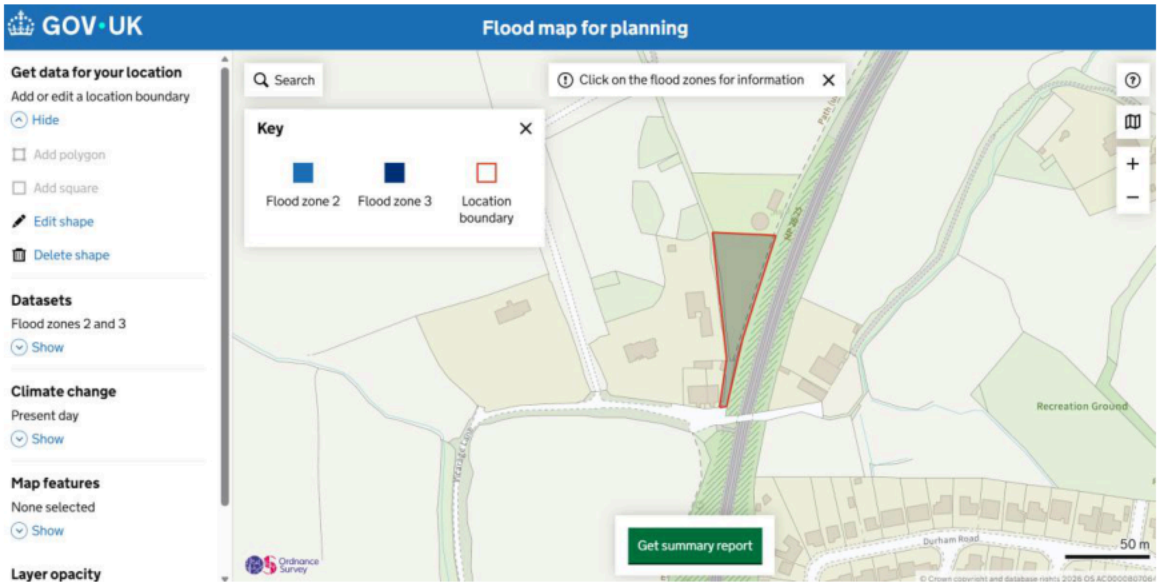
Environment Agency, Flood risk assessments: climate change allowances. https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances

Lancashire County Council, Sustainable drainage systems planning advice. https://www.lancashire.gov.uk/environment-and-planning/planning/sustainable-drainage-systems/

MHCLG, Planning Practice Guidance: Flood risk and coastal change, paragraph 039, safe access considerations. https://www.gov.uk/guidance/flood-risk-and-coastal-change (reviewed 25 October 2026). Other references retained from P01. Appendices reproduce supplied evidence; use original drawings for scaled measurement.

APPENDIX A1 FLOOD ZONES

Environment Agency Flood Map for Planning supplied screenshot

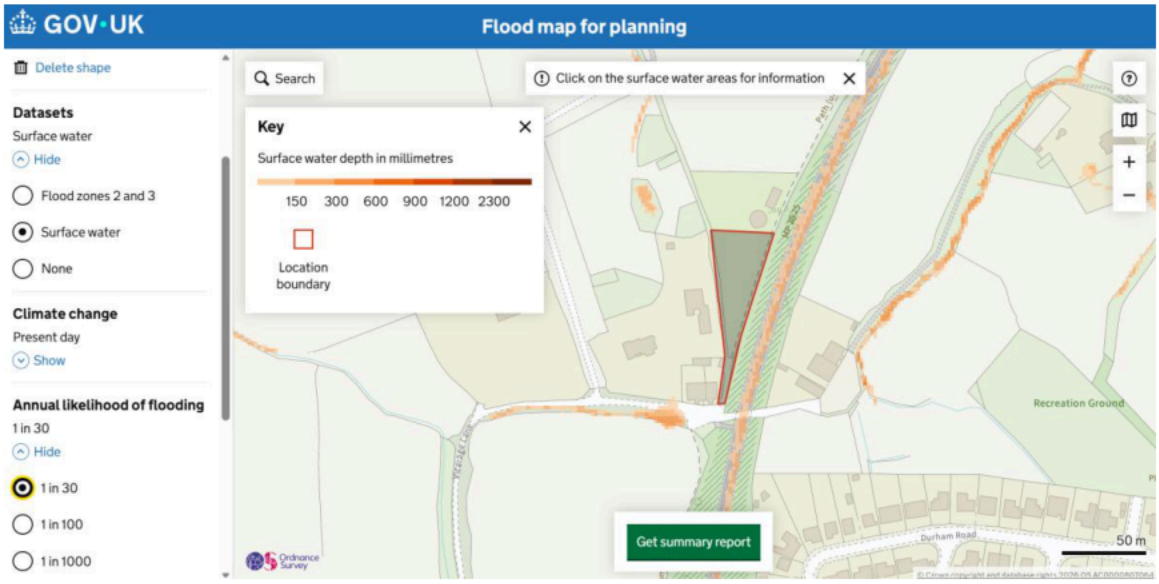


The supplied present-day Flood Zone view shows the selected plot outside Flood Zones 2 and 3. The selected red polygon is a screening boundary and does not reproduce all demolition land.

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APPENDIX A2 SURFACE WATER 1 IN 30

Environment Agency Flood Map for Planning supplied screenshot

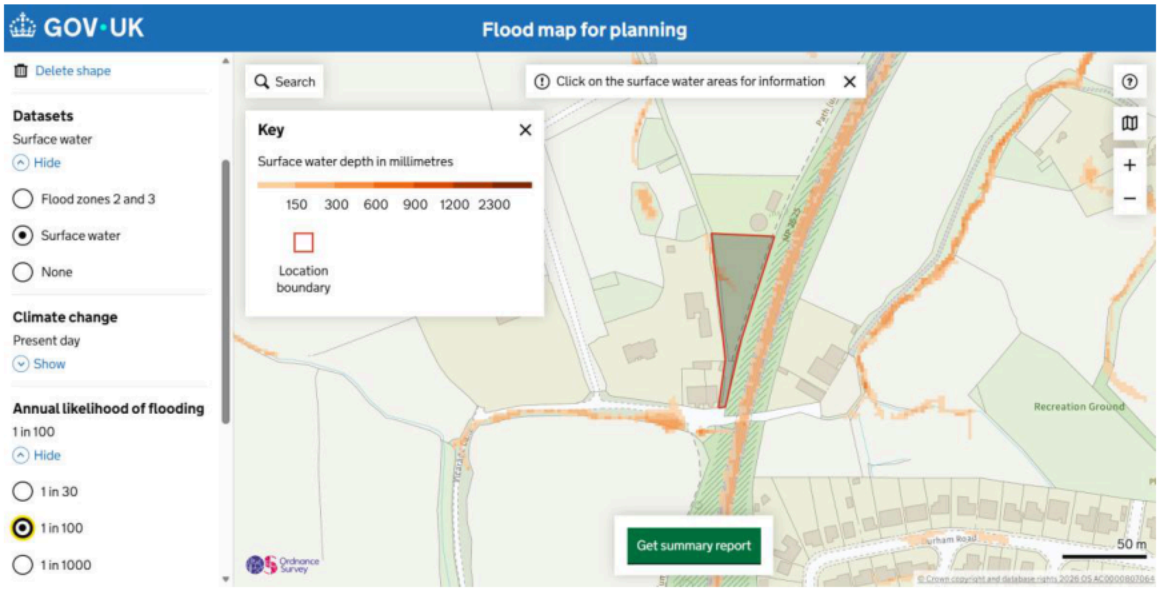


Present-day 3.3% AEP depth view. Flooding is apparent on Vicarage Lane and within the railway corridor. No clear internal patch is visible in the main residential plot.

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APPENDIX A3 SURFACE WATER 1 IN 100

Environment Agency Flood Map for Planning supplied screenshot

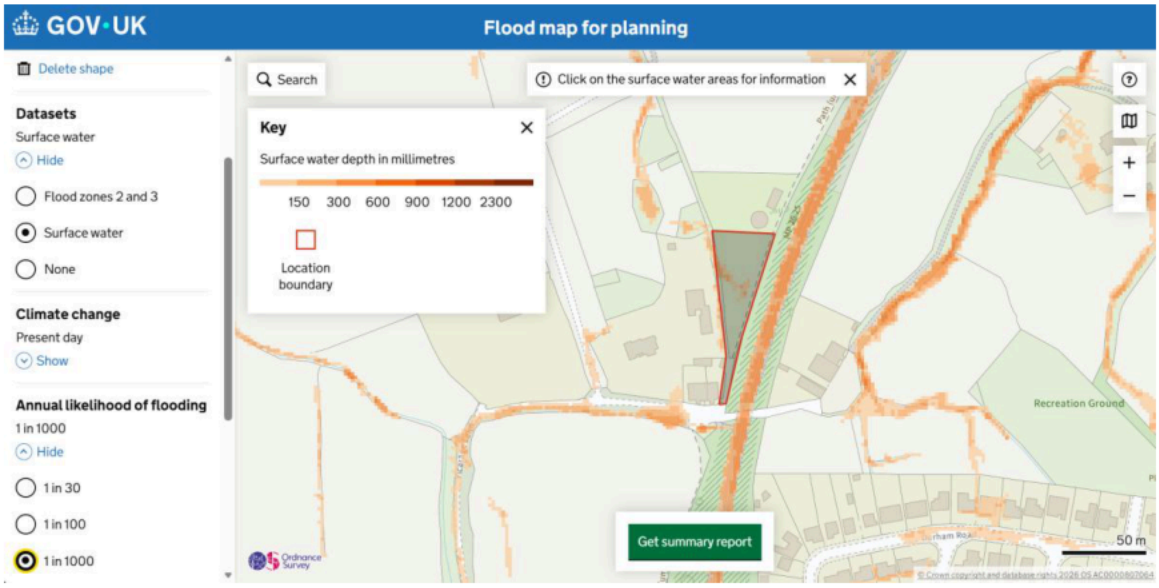


Present-day 1% AEP depth view. The localised feature enters from the western boundary. Refer to Appendix B for the revised dwelling position and climate change overlay.

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APPENDIX A4 SURFACE WATER 1 IN 1000

Environment Agency Flood Map for Planning supplied screenshot

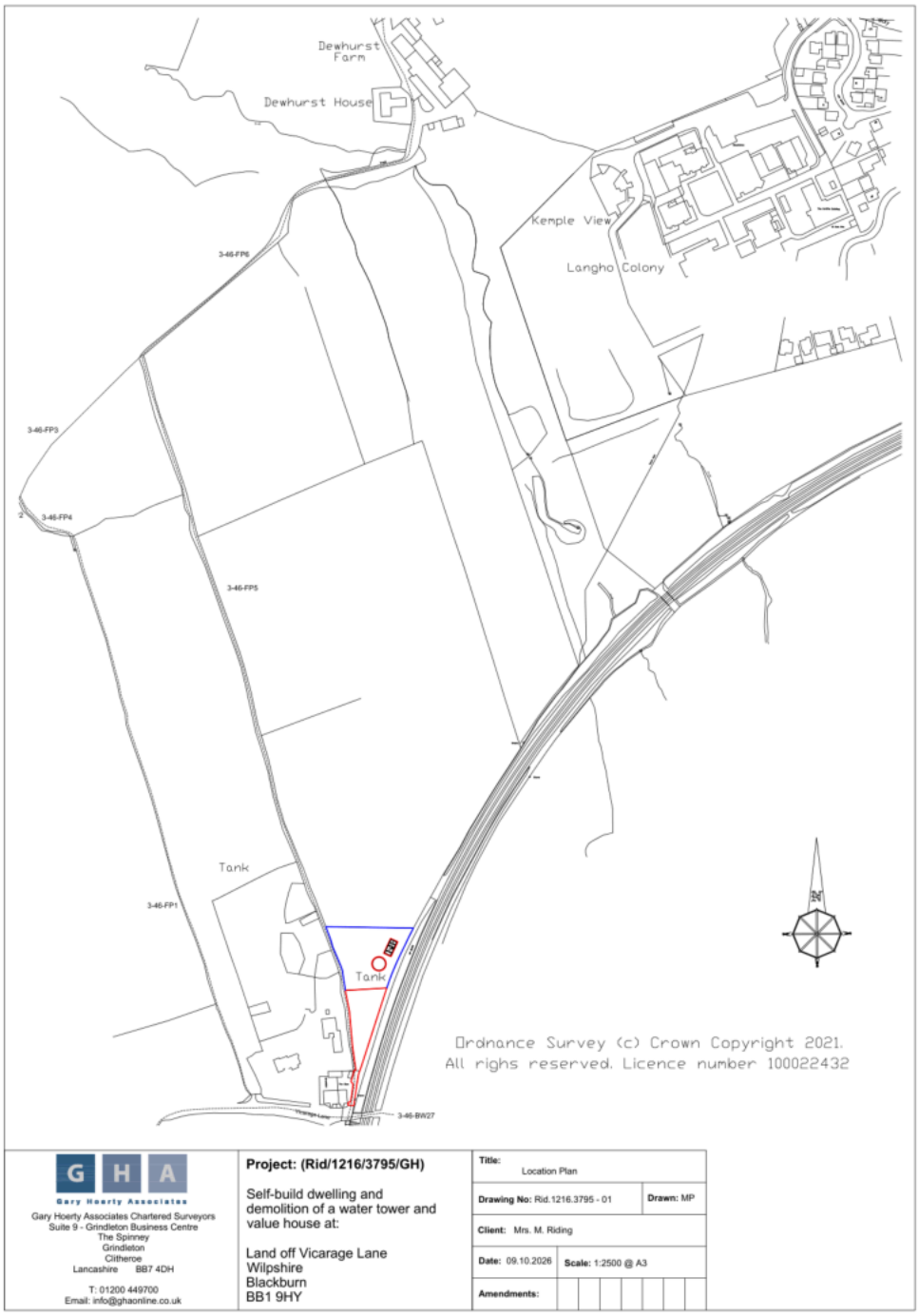


Present-day 0.1% AEP depth view. The feature within the plot and flooding of the surrounding routes are more extensive. This is a residual-risk screen and is not a climate change model.

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APPENDIX B1 LOCATION PLAN

Gary Hoerty Associates | Rid.1216.3795-01 | 9 October 2026



Reduced reproduction. Use the original A3 PDF for scaled measurement.

APPENDIX B2 REVISED LAYOUT - PRESENT DAY

Gary Hoerty Associates | Rid.1216.3795.GH | V2 | 23 October 2026



Reduced reproduction; use the original A3 PDF for scaled measurement. Source overlays do not include a depth legend, annual probability or climate change epoch/allowance.

APPENDIX B3 REVISED LAYOUT - CLIMATE CHANGE

Gary Hoerty Associates | Rid.1216.3795.GH | V2 | 23 October 2026



Reduced reproduction; use the original A3 PDF for scaled measurement. Source overlays do not include a depth legend, annual probability or climate change epoch/allowance.