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**PROPOSED RESIDENTIAL DEVELOPMENT
LAND ADJACENT TO 1 CORPORATION ROAD, ROCHDALE**

FLOOD RISK ASSESSMENT

November 2022

Commissioned by: Nazir Ahmed

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1.0 INTRODUCTION AND DEVELOPMENT DESCRIPTION

1.1 Project Introduction and Objectives

Nazir Ahmed has commissioned NSugg Ltd. to undertake a Flood Risk Assessment (FRA) to support a planning application for the erection of a residential dwelling on land adjacent to 1 Corporation Road, Rochdale. This document represents a site-specific FRA for the proposed development and has been undertaken in accordance with the relevant planning policy and guidance outlined below.

1.2 Planning Policy and Guidance

1.2.1 National Planning Policy

The National Planning Policy Framework (NPPF)¹ and associated Planning Practice Guidance for Flood Risk² aim to steer new development to areas with the lowest risk of flooding.

New development must also ensure that flood risk is not increased elsewhere, and where appropriate, planning applications should be supported by a site-specific Flood Risk Assessment.

The NPPF recommends that development should only be allowed in areas at risk of flooding where the FRA (and the sequential and exception tests, as applicable) can demonstrate that:

- a) within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location;
- b) the development is appropriately flood resistant and resilient;
- c) it incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate;
- d) any residual risk can be safely managed; and
- e) safe access and escape routes are included where appropriate, as part of an agreed emergency plan.

The guidance confirms that major developments should incorporate sustainable drainage systems unless there is clear evidence that this would be inappropriate.

1.2.2 Environment Agency Policy and Guidance

The Environment Agency's guidance for FRAs³ confirms that planning applications for the following development proposals must be supported by a FRA:

- Development in Flood Zone 2 or 3 including minor development and change of use
- Development sites of more than 1 hectare (ha) in Flood Zone 1

¹ Ministry of Housing, Communities & Local Government, March 2012 (last updated: July 2021), National Planning Policy Framework.

² Ministry of Housing, Communities & Local Government, March 2014, Planning Practice Guidance, Flood Risk and Coastal Change.

³ Environment Agency, March 2014 (last updated: August 2022), Guidance – Flood Risk and Coastal Change.

- Development sites less than 1 ha in Flood Zone 1, including a change of use in development type to a more vulnerable class (for example from commercial to residential), where they could be affected by sources of flooding other than rivers and the sea (for example surface water drains, reservoirs)
- Development in an area within Flood Zone 1 which has critical drainage problems as notified by the Environment Agency

The Agency's guidance supports the NPPF and specifies the requirements for FRAs based on the level of flood risk and the vulnerability of the proposed development to flooding.

1.2.3 Local Policy and Guidance

The following documents provide local flood risk policy and guidance for development within Rochdale:

- The Bury, Rochdale and Oldham 2009 Strategic Flood Risk Assessment (SFRA)⁴ presents a summary of the local hydrology, potential sources of flood risk across the region and flood risk information for planning.
- Rochdale Borough's Strategy for Flood Risk Management⁵ (LFRMS) provides further details of local flood risk sources and proposals for future management strategies.
- Rochdale Borough Council's Core Strategy (adopted October 2016) presents current local planning policy. Policy G8: Managing Water Resources and Flood Risk, states:

We will ensure that new development (including flood risk mitigation measures) does not lead to any form of increased flooding locally or further downstream, does not impede natural water and flood risk management, is not detrimental to existing or potential flood storage areas, contributes where possible to alleviating existing flood risk, is itself well protected from flood risk and ensures prudent use of water resources. We will require:

a. Compliance with a 'sequential' approach to new development and flood risk, directing development away from areas of high risk, in accordance with the National Planning Policy Framework;

b. Full regard to and compliance with the advice of the Environment Agency (or equivalent agency) and the objectives and priorities for flood risk management set out in the Local Flood Risk Management Strategy, including any mitigation measures recommended for particular sites;

c. Full regard to the published evidence of local flood risk and its significance as included in Strategic Flood Risk Assessments, Surface Water Management Plans and other recognised sources of flood risk data and the production of additional Flood Risk Assessments (FRAs) as appropriate;

d. Incorporation of appropriate measures for the management of surface and flood water, including flood storage areas, Sustainable Urban Drainage Systems (SUDS) and the protection of 'overland flow paths';

e. Compliance with any Surface Water Management Plan or drainage strategies produced, such as for the identified critical drainage areas of Littleborough and Heywood;

⁴ JBA Consulting, November 2009, Bury, Rochdale and Oldham Strategic Flood Risk Assessment. Volume II, Level 1 SFRA. Final Report.

⁵ Rochdale Borough Council, March 2014, Rochdale Borough's Strategy for Flood Risk Management 2014-2024.

f. The avoidance of culverting, and support the opening up of existing culverts wherever possible;

g. The incorporation of measures for the conservation of water to minimise potable water consumption, including rainwater collection measures, which should be integral to the design of buildings and spaces;

h. Development that does not directly or indirectly lead to pollution of existing water resources such as watercourses and groundwater or the derogation of the quantity of groundwater;

i. The incorporation of measures to improve water quality; and

j. The taking of opportunities to improve the habitat value of watercourses and water bodies.

In addition, we will identify additional flood storage areas which will be protected from development

1.3 Site Location

The application site is located at 1 Corporation Road, Rochdale, OL11 4EU as shown on the Site Location Plan within Appendix 1. The site is located within a mixed-use, residential and commercial/light industrial area, approximately 1km west of Rochdale town centre.

The Environment Agency's on-line flood map for planning indicates that the application site extends into Flood Zone 2, defined as land with a medium probability of flooding from rivers or the sea.

The National Planning Policy Framework (NPPF) and associated technical guidance confirms that all applications for proposed new development within Flood Zone 2 or 3 and development proposals exceeding one hectare within Flood Zone 1 must be accompanied by a site-specific Flood Risk Assessment.

1.4 Topography and Existing Land Use

Review of Ordnance Survey mapping indicates that the local topography is relatively flat-lying, with a gentle topographic fall to the north-west, towards the River Roch, with a ground level of approximately 117mAOD within the area of proposed development.

Figure 1 presents an extract of the Environment Agency's LIDAR topographic data, which confirms a ground level of between 116.5mAOD and 117.1mAOD within the area of proposed development.



Figure 1. Environment Agency LIDAR Topographic Data

The application site comprises the residential dwelling of 1 Corporation Road; the area of proposed development is limited to the rear garden, within the curtilage of the property, as indicated on the development plans within Appendix 2.

1.5 Hydrological Features

The application site lies within the surface water catchment of the River Roch, which flows in a general south-westerly direction through Rochdale, passing approximately 50m north-west of the area of proposed development. The River Roch is classified as a main river and meanders through the town centre, discharging into the River Irwell near Whitefield, approximately 10km downstream. The LFRMS⁵ states that flows within the River Roch respond rapidly to intense rainfall with central Rochdale identified as being at risk of flash flooding.

The River Spodden, a main river tributary of the River Roch, converges with the River Roch approximately 350m upstream of the application site.

No other watercourses or significant surface water features have been identified in the vicinity of the application site.

Figure 2 presents the River Roch in the vicinity of the application site



Figure 2. River Roch at Corporation Road, Rochdale (view south-east, extracted from Google Streetview)

The local hydrological setting is presented in Figure 3 below.

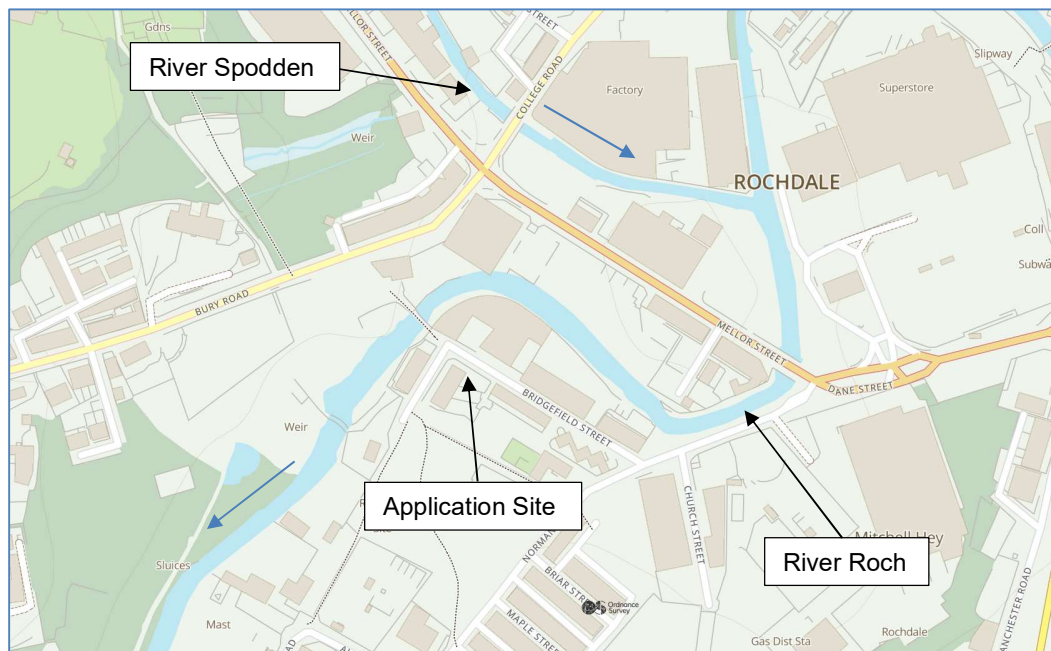


Figure 3. Local Hydrological Setting

1.6 Proposed Development and Flood Risk Vulnerability Classification

The proposed development comprises the erection of a single storey dwelling within the existing rear garden of 1 Corporation Road. The new dwelling will benefit from vehicle and pedestrian access off Bridgefield Street. Proposed development plans are included within Appendix 2.

In terms of flood risk vulnerability classification, residential dwellings are classified as 'more vulnerable'. This is discussed further in Section 2.3.

2.0 FLOOD RISK ASSESSMENT

2.1 Sources of Information

In addition to the flood risk planning policy and guidance outlined in Section 1.2, the following sources of information have been consulted during the preparation of this FRA:

- Environment Agency website – for information regarding surface water, reservoir and fluvial/tidal flood risk and outline flood zone maps.

The Environment Agency was consulted on 18th November 2022 to obtain site-specific predicted flood water levels (Product 4 data); no response has been received at the time of reporting. It is recommended that the proposed flood risk mitigation measures be reviewed following receipt of this information, as discussed in Section 2.4.

2.2 Flood Hazard

All potential sources of flooding to the application site are considered within this section of the report.

2.2.1 Environment Agency Flood Zone Map and Fluvial/Tidal Flood Risk

The application site is not coastal or in the vicinity of a tidal watercourse and is not therefore at risk of tidal flooding.

The Environment Agency flood zone map presents information regarding the fluvial flood risk to the application site and is included as Figure 4 below. The flood zone map indicates that the north-western part of the application site is located within Flood Zone 1, defined as land with a low probability of flooding (<0.1% annual probability). The south-eastern part of the site extends into Flood Zone 2, defined as land with a medium probability of fluvial flooding (between 0.1% and 1.0% annual probability of flooding).

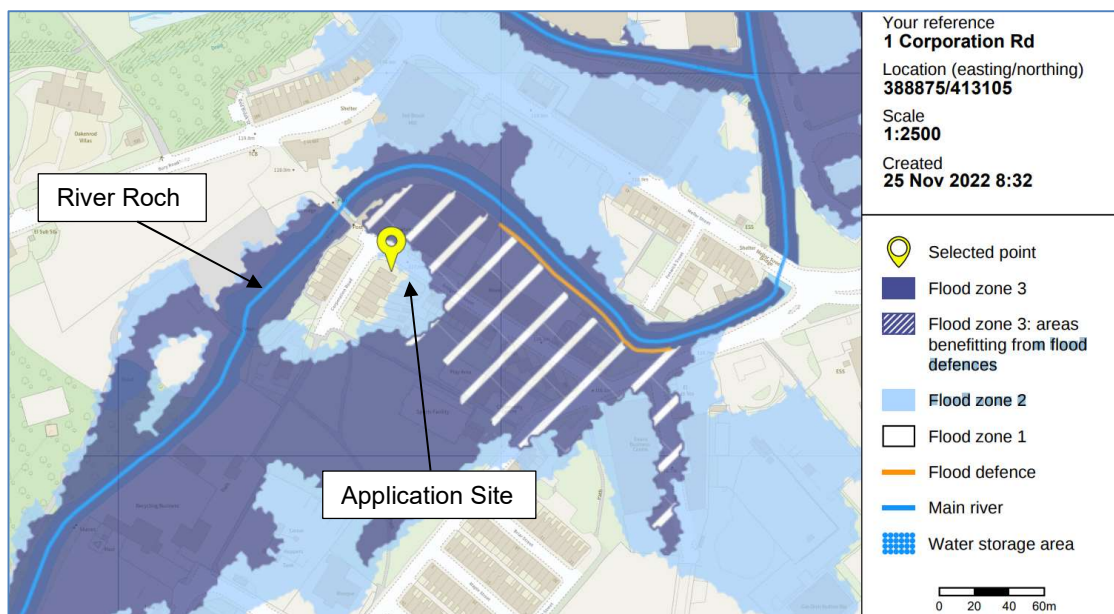


Figure 4. Environment Agency Flood Zone Map⁶

⁶ www.flood-map-for-planning.service.gov.uk accessed 25th November 2022.

The Environment Agency's flood zone map (Figure 4) does not take account of local flood defences. Land to the immediate north-east of the application site is shown to benefit from flood defences along the River Roch.

Figure 5 presents the Environment Agency's flood map for rivers and the sea which takes into account local flood defences. This confirms that the risk of fluvial flooding within the application site and adjacent Bridgefield Street is very low (<0.1% annual probability of flooding), due to the presence of flood defences.

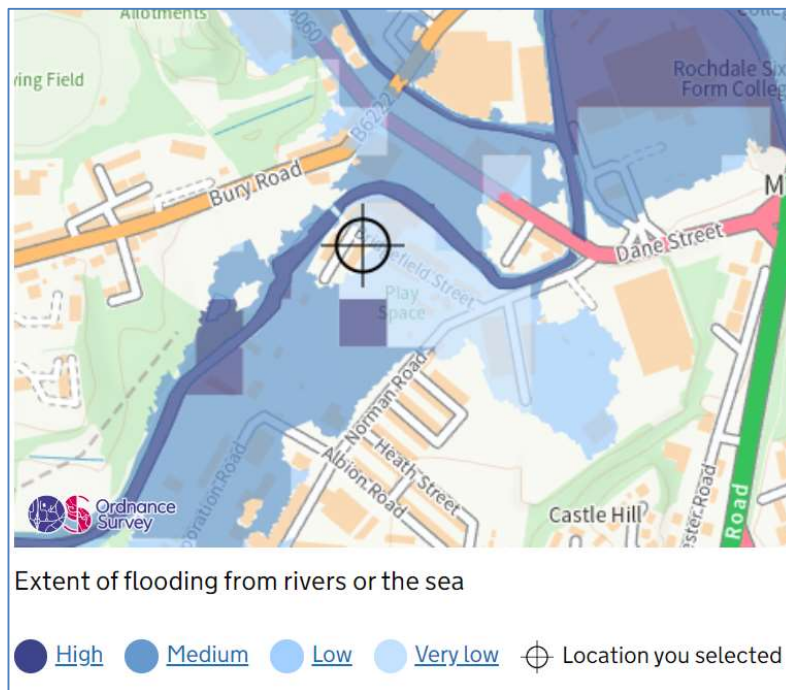


Figure 5. Environment Agency Flood Map – Extent of Flooding from Rivers or the Sea

Due to the Environment Agency's response times, this FRA has been prepared in advance of receipt of the site-specific Product 4 data, which is likely to include predicted peak flood water levels for the site. Therefore, reliance is placed on published flood mapping.

Figure 5 above, confirms that the application site, including the area of proposed development has a very low risk of fluvial flooding (<0.1% annual probability) due to the presence of local flood defences. Therefore, it is inferred that the site would remain safe and dry during the design flood event, which is represented by the 1.0% annual probability flood event + long term climate change.

Figure 6 below, presents an extract of the 2019 Greater Manchester wide Level 1 SFRA (detailed map 31, Rochdale). This indicates that, in the vicinity of the application site, the present-day Flood Zone 2 extent (pale blue shading) is approximately equivalent to the future Flood Zone 3 extent, with a 70% climate change allowance. Section 2.2.4 of this FRA confirms that a 35% climate change allowance is appropriate for the lifetime of the development, therefore the SFRA mapping is considered a worse case, with regards climate change. This ignores the presence of flood defences.

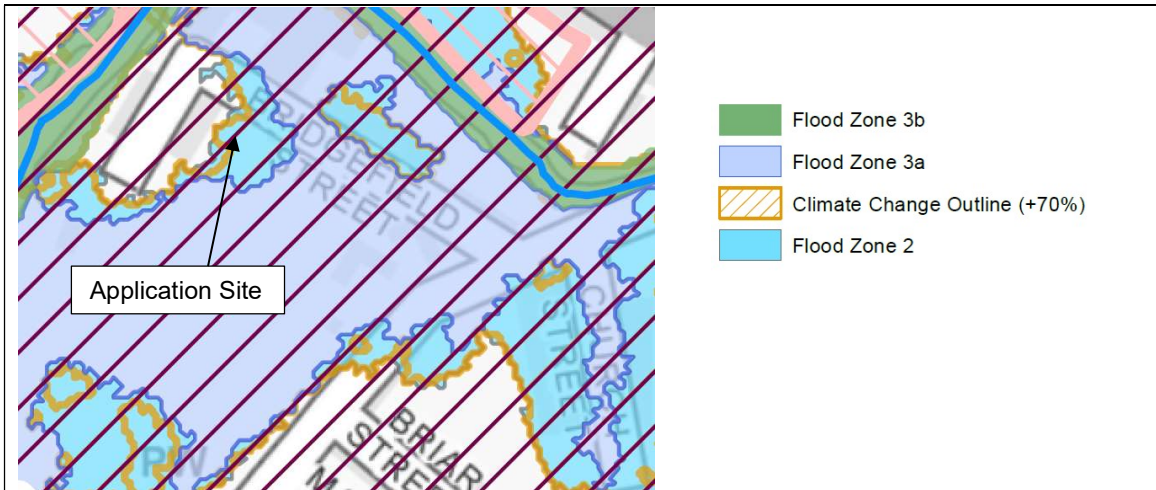


Figure 6. Predicted Future Extent of Flood Zone 3 (Extract from 2019 Manchester SFRA)

In the absence of flood defences, the predicted peak flood water level within the area of proposed development, during the design flood event (1% annual probability + 35% climate change), is expected to be shallow (<300mm). This is based on the local topography, and the flood zone extents, with no flooding predicted to occur immediately to the north-west of the development footprint. It is reiterated that the site benefits from the presence of local flood defences for the design flood event.

Figure 7 below presents an extract of the Environment Agency's online flood defence asset register in the vicinity of the application site.

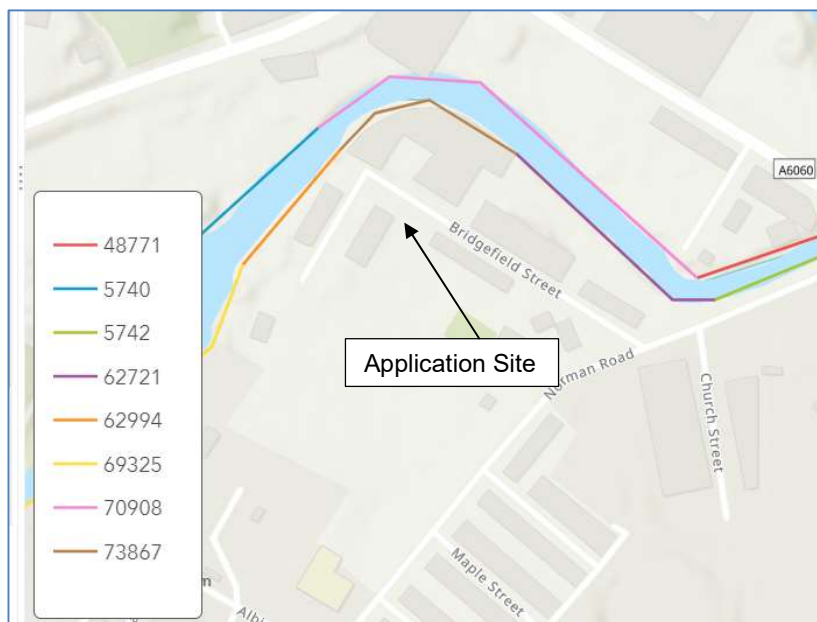


Figure 7. Environment Agency Flood Defence Assets

Only the flood defence asset 62721 is identified on the Environment Agency's flood zone map (Figure 4) as a formal flood defence. This represents a raised wall; all other assets are classified as natural high ground.

The flood zone map (Figure 4) confirms that the application site and surrounding land benefits from the presence of this flood defence wall.

Details of the flood defence wall (asset 62721) are summarised in Table 1 below, confirming it has a design standard of protection of 100 years. However, the Environment Agency's asset register confirms a design crest level for the wall of 117.1mAOD compared to an actual downstream crest level of 120.46mAOD, suggesting that a significantly greater standard of protection is actually provided, compared to the 100 year design standard.

Table 1: Details of Environment Agency Flood Defence Assets

Asset ID & Details	Length (m)	Upstream Crest Level (mAOD)	Downstream Crest Level (mAOD)	Design Standard of Protection
62721 – wall	124.73	117.06	120.46	100 year

Information extracted from the Environment Agency's online flood defence asset register

The wider risk of fluvial flooding within Rochdale is currently being addressed via the £56m Rochdale and Littleborough Flood Risk Management Scheme⁷. Phase 1 of the scheme in Littleborough (upstream of Rochdale) is ongoing, with works for Phase 2 of the scheme in Rochdale currently forecast to start in 2025. Whilst no detailed assessment of the benefit provided by these works to the proposed development is currently available, it is assumed that they will further reduce the risk of fluvial flooding within Rochdale and therefore within the application site.

In summary, the available information indicates that the application site is protected from fluvial flooding during the design flood event by existing flood defences. However, there is a residual risk of flooding in the unlikely event of flood defence failure or overtopping during an extreme flood event. In the absence of flood defences, predicted peak flood water levels are shallow (<300mm), based on the flood zone extents and local topography. Appropriate flood risk mitigation measures are recommended for the development in Section 2.4.

2.2.2 Other Potential Sources of Flooding

The local SFRA and online flood maps have been reviewed to identify any other potential sources of flood risk to the application site and evidence of historic flood events in the local area. This information is presented in Table 2 below.

⁷ <https://thefloodhub.co.uk/rochdale-and-littleborough/#section-1>

Table 2: 1 Corporation Road, Rochdale – Potential Sources of Flooding

Potential Source	Potential Risk at Application Site?	Reasoning
Fluvial Flooding	Yes	The application site is located partially within Flood Zone 2 associated with the River Roch, but benefits from local flood defences. The risk of fluvial flooding is discussed in Section 2.2.1.
Tidal Flooding	No	The application site is not coastal or in the vicinity of a tidal watercourse.
Flooding from High Groundwater	No	The SFRA states: <i>there are relatively few reported incidents of groundwater flooding in Bury, Rochdale and Oldham.</i> Figure 6 of the LFRMS indicates that the application site lies within an area with moderate susceptibility to groundwater flooding, based on the geological and hydrogeological conditions. A published geological log is available from the British Geological Survey's online mapping for a borehole installed in 1996 on Bridgefield Street, within 20m to the north of the application site. The log confirms that the borehole was installed to a depth of 5m below ground level, through made ground, sandy clay and weathered siltstone, with no groundwater encountered. Any shallow groundwater is likely to discharge to and be in hydraulic continuity with the adjacent River Roch. No below-ground development is proposed; therefore, the risk of groundwater flooding to the development is considered very low.
Surface Water Flooding	No	The Environment Agency's online mapping confirms that the application site has a very low risk of surface water flooding. This is discussed further below.
Flooding from Artificial Drainage Systems	No	The SFRA confirms that Rochdale is not an area that has recorded significant historic flood events from drains/sewers. The local topography falls gently away from the site towards the River Roch, providing a flow path for any exceedance flows. Therefore, the risk of flooding from drains and sewers is considered low.
Flooding due to Infrastructure Failure	Yes	The Environment Agency's online mapping indicates that the application site is within the predicted maximum extent of flooding of local reservoir(s). This is discussed below.

Table 2 confirms that the only significant potential sources of flooding identified within the application site are fluvial flooding associated with the River Roch and flooding due to failure of local reservoir(s).

Figure 8 presents the Environment Agency's reservoir flood map and indicates that the application site is within the predicted maximum flood extent of local reservoir(s), in the unlikely event of reservoir failure. In England, reservoirs that are capable of holding 25,000m³ or more of water are regulated under the Reservoirs Act 1975, as amended by the Flood and Water Management Act, 2010. These reservoirs are registered with the Environment Agency and subject to inspection and supervision by reservoir engineers. Therefore, due to the tight regulations on periodic inspections and maintenance of the reservoirs, the probability of reservoir failure is very low and the risk of flooding to the application site from reservoirs is considered low and acceptable.

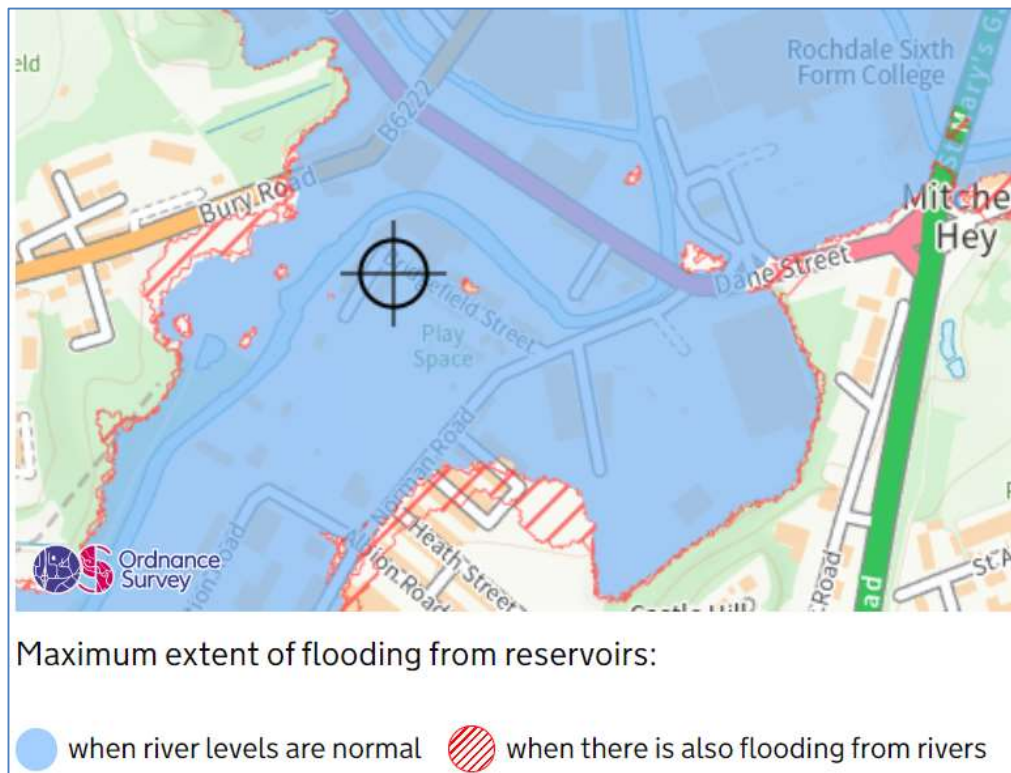


Figure 8. Environment Agency Reservoir Flood Map

Figure 9 presents the Environment Agency's surface water flood map for the application site; this indicates that the risk of surface water flooding within the area of proposed development is very low (<0.1% annual probability).

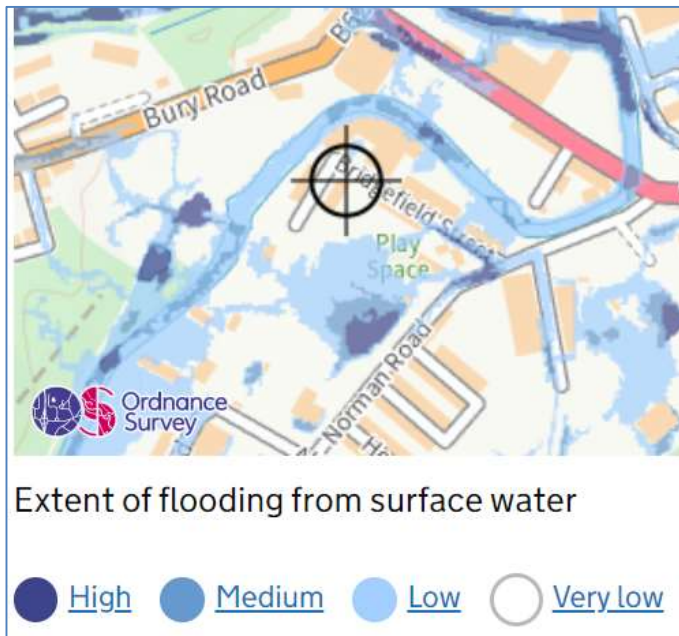


Figure 9. Environment Agency Surface Water Flood Map

2.2.3 Historic Flooding

Review of the Environment Agency's online historic flood map confirms that the application site is not within, or in the vicinity of, an area that has previously recorded flooding⁸.

However, it is noted that the application site is within the Environment Agency's Flood Warning Area for the River Roch in Rochdale.

2.2.4 Climate Change

The Environment Agency's climate change allowances guidance⁹ confirms that rainfall, sea levels and river flows are predicted to increase as a result of climate change, which must be considered throughout the lifetime of the proposed development. The application site lies within the Irwell Management Catchment, where river flows are predicted to increase by between 35% (central allowance) and 75% (upper end allowance) by the 2080s.

The Environment Agency's guidance states that the central climate change allowance (35%) should be applied to 'more vulnerable' development in Flood Zone 2.

In the absence of the Environment Agency's site-specific Product 4 data and predicted peak flood water levels, this FRA has relied on published mapping, with the SFRA flood zone map (Figure 6) including a 70% allowance for climate change. This indicates that the future Flood Zone 3 extent, when climate change is taken into consideration, is approximately equivalent to the present-day Flood Zone 2 extent. This ignores the presence of flood defences. Figures 4 and 5 above confirm that the application site is protected from fluvial flooding by local flood

⁸ <https://environment.data.gov.uk/DefraDataDownload/?mapService=EA/HistoricFloodMap&Mode=spatial> accessed 28th November 2022.

⁹ Environment Agency, February 2016 (last updated: May 2022), Guidance: Flood Risk Assessments: Climate Change Allowances.

defences and is effectively within low probability Flood Zone 1 (<0.1% annual probability of flooding), due to the presence of flood defences.

Therefore, it is inferred that the application site would remain safe and dry during the design flood event, equivalent to the 1% annual probability event +35% climate change, due to the presence of flood defences. There is a residual risk of flooding, in the event of flood defence failure or overtopping during an extreme flood event and appropriate mitigation measures are recommended in Section 2.4 below.

2.3 The Sequential Test & Environment Agency Flood Zone Compatibility

As set out in the NPPF, the aim of the sequential test is to steer new development to areas with the lowest probability of flooding (Flood Zone 1). The area of proposed development just encroaches into Flood Zone 2 associated with the River Roch, but benefits from the presence of local flood defences. The flood defences ensure that the risk of flooding within the application site is <0.1% annual probability, which is equivalent to low probability Flood Zone 1.

The area of proposed development is located within the curtilage of an existing residential property and is surrounded by predominantly residential development along Bridgefield Street; all with a comparable level of flood risk and benefitting from the local flood defences.

Table 2 of the Environment Agency's flood risk assessment guidance³ confirms that 'more vulnerable' land uses, which includes residential development, are considered appropriate within Flood Zones 1 and 2.

The application site benefits from local flood defences, but it is recognised that a residual risk of flooding remains in the unlikely event of a flood defence breach or overtopping during an extreme flood event. Therefore, appropriate flood risk mitigation measures are outlined in Section 2.4.

2.4 Flood Risk Mitigation

Section 2.2.1 confirms that the area of proposed development is protected from fluvial flooding during the design flood event, by the presence of local flood defences. However, there is a residual risk of flooding in the event of flood defence failure or overtopping during an extreme flood event greater than the design event. Review of the local topography and flood zone extents in Section 2.2.1, indicates a peak undefended flood water depth of <300mm, without the presence of local flood defences. Therefore, the following flood risk mitigation measures are recommended:

- The finished floor level of the development should be no lower than:
 - 300mm above average external site level or
 - the existing floor level of 1 Corporation Road; whichever is the higher.
- Flood resilient design measures should be incorporated to a minimum elevation of 600mm above floor level; such measures include: raising electrical services and the use of flood resilient fixtures and fittings including appropriate floor coverings; further details are available within Environment Agency Science Report SC040066/SR *Improving the Flood Performance of New Buildings* (2007).
- The application site lies within the Environment Agency's Flood Warning Area for the River Roch at Rochdale. Therefore, it is recommended that a Flood Warning and Evacuation Plan be prepared for the dwelling and the owner/occupants should sign up to the Environment Agency's free Flood Warning Service. The Flood Warning and

Evacuation Plan should set out the actions to be taken in the event of a Flood Alert or Flood Warning being issued. The document should be prepared in accordance with the Environment Agency's Personal Flood Plan template which is included as Appendix 3. It is noted that safe access and egress, within low probability Flood Zone 1, is available via the adjacent Norman Road or the pedestrian footbridge over the River Roch.

- External surfaces, including driveway and parking areas, should be developed with permeable materials to minimise surface water runoff rates and flood risk to others.

It is recommended that the above mitigation measures be reviewed and updated upon receipt of the Environment Agency's Product 4 data.

3.0 SUMMARY AND CONCLUSIONS

This report represents a site-specific Flood Risk Assessment to support the proposed development of a residential dwelling on land adjacent to 1 Corporation Road, Rochdale OL11 4EU. This FRA has been prepared in accordance with current national and local policy and guidance.

The Environment Agency flood zone map for planning indicates that the area of proposed development is located on the edge of Flood Zone 2; therefore, a detailed site-specific FRA is required.

A review of all potential sources of flooding to the application site has been undertaken and the only significant potential source of flooding is identified as fluvial flooding from the River Roch. The Environment Agency has been consulted to obtain site-specific predicted fluvial flood water level data (Product 4 data); however, no response has been received at the time of reporting. Therefore, this FRA has been prepared using published data and assuming that the present-day Flood Zone 2 extent represents the future Flood Zone 3 extent, when long-term climate change is taken into consideration.

The Environment Agency's flood maps confirm that the area of proposed development benefits from local flood defences and has a very low probability of fluvial flooding (<0.1% annual probability), due to the presence of flood defences. Therefore, the site is effectively located within Flood Zone 1 when flood defences are taken into consideration.

There is no evidence of historic flooding from any source at the application site.

In the absence of flood defences, the predicted peak flood water level during the design flood event is considered limited (<300mm), as the site is located on the edge of Flood Zones 1 and 2 with gently sloping topography. Due to the residual risk of flooding in the event of flood defence failure or overtopping, a number of mitigation measures are recommended:

- The finished floor level of the development should be no lower than:
 - 300mm above average external site level or
 - the existing floor level of 1 Corporation Road; whichever is the higher.
- Flood resilient design measures should be incorporated to a minimum elevation of 600mm above floor level.
- A Flood Warning and Evacuation Plan should be prepared for the dwelling and the owner/occupants should sign up to the Environment Agency's free Flood Warning Service.
- External surfaces, including driveway and parking areas, should be developed with permeable materials to minimise surface water runoff rates and flood risk to others.

It is recommended that the above mitigation measures be reviewed and updated upon receipt of the Environment Agency's Product 4 data.

This FRA concludes therefore, that the proposed erection of a residential dwelling, classified as 'more vulnerable' development, on land adjacent to 1 Corporation Road, Rochdale, is appropriate and sustainable with regards to flood risk.

4.0 CLOSURE

This report has been prepared by Nicola Sugg (trading style of NSugg Limited) with all reasonable skill and care, and in accordance with the services agreed with Nazir Ahmed. Relevant information provided by Irasia Designs and Nazir Ahmed has been accepted in good faith as being accurate and valid. This report is based on the relevant guidance and legislation in force at the date of the report and should be reviewed if such guidance and legislation are amended or superseded.

NSugg Ltd do not warrant that the advice in this report will guarantee the availability of flood insurance either now or in the future.

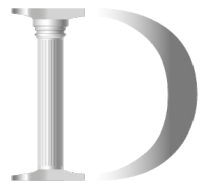
It will be the owner's /occupier's responsibility to ensure the recommended flood risk mitigation measures outlined within this FRA are implemented and to maintain the site drainage system throughout the lifetime of the development.

This report is for the exclusive use of Nazir Ahmed and Irasia Designs; no warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from Nicola Sugg.

APPENDIX 1



1 Location Plan
Scale: 1:1250



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Mr Nasir Ahmed

Land Adjacent To
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Rochdale, OL11 4EU

Location Plan

Drawing No: **pln030.01** /

Scale: **1:1250 @ A4**

Issue Date: **05.10.22**

Drawn: **IS**

Checked: **--**

Revision Notes

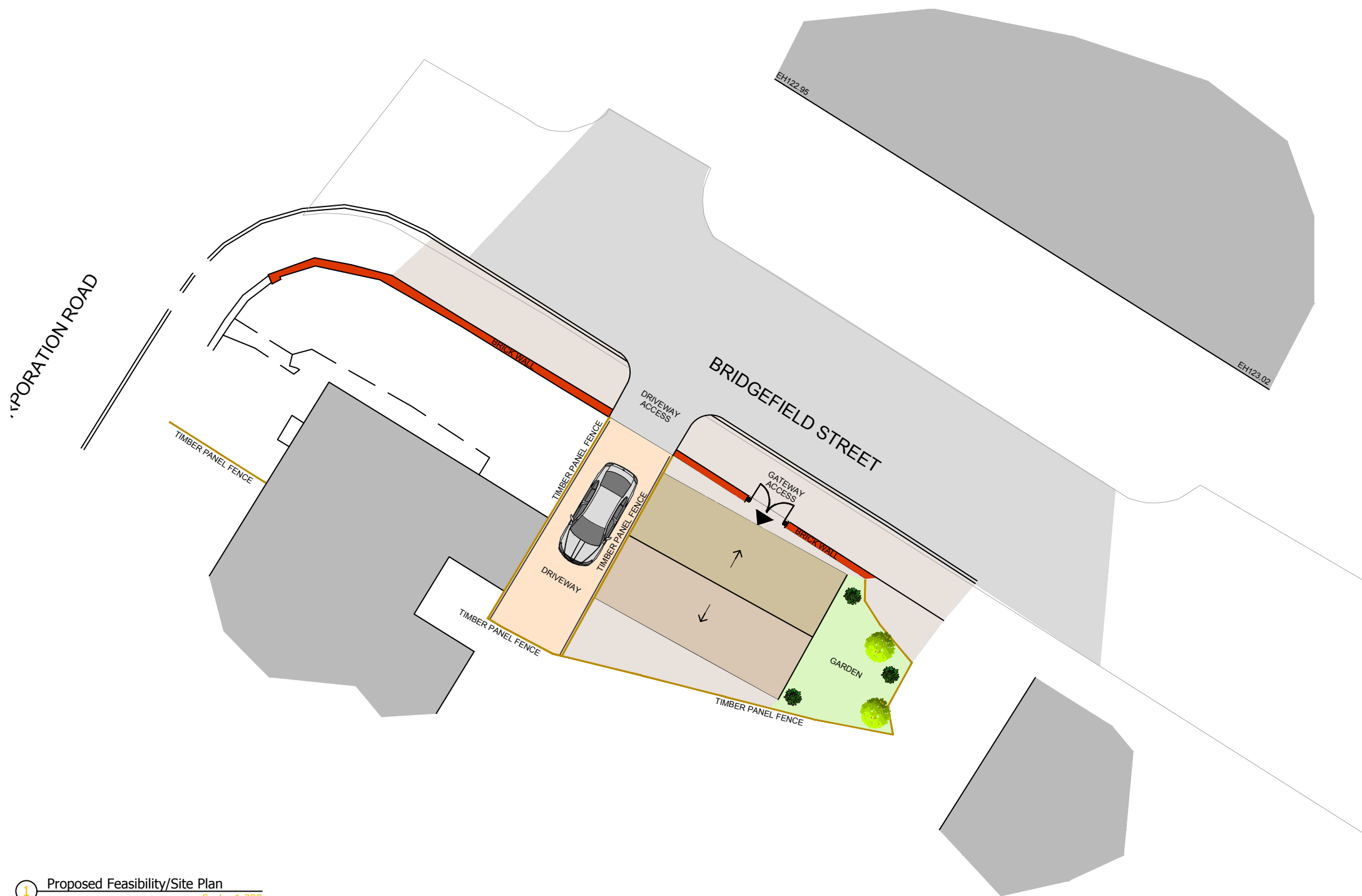
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Notes

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APPENDIX 2



1 Proposed Feasibility/Site Plan
Scale: 1:200



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Mr Nasir Ahmed

Land Adjacent To
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**Proposed
Feasibility/Site Plan**

Drawing No: pln030.02 /

Scale: 1:200 @ A3

Issue Date: 05.10.22

Drawn: IS

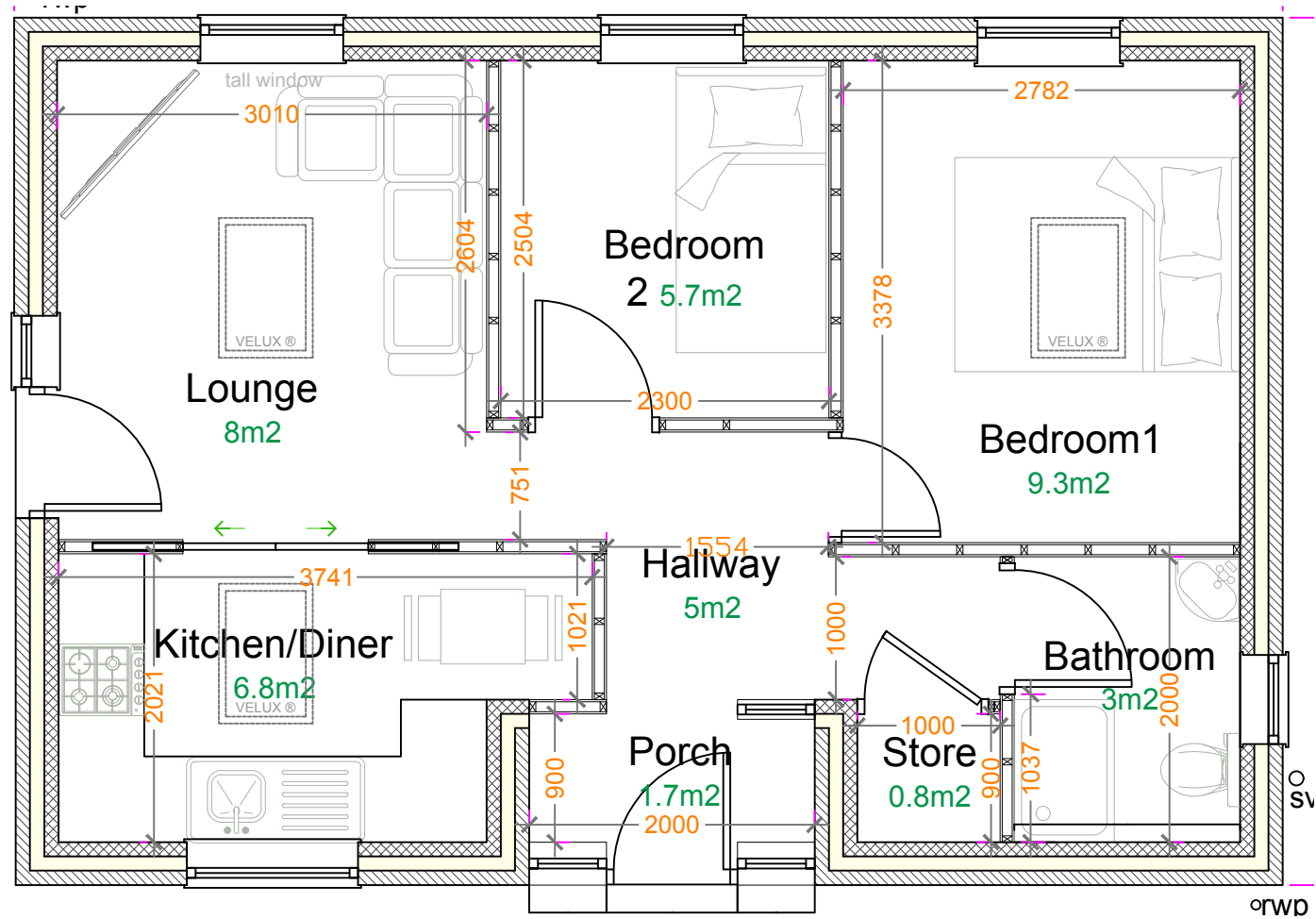
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Revision Notes

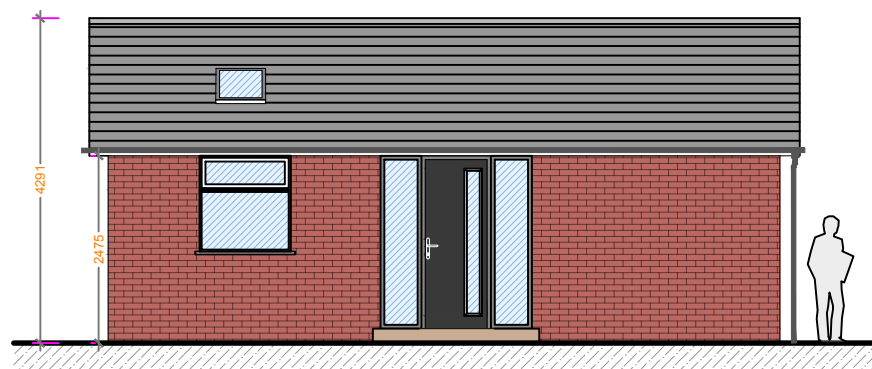
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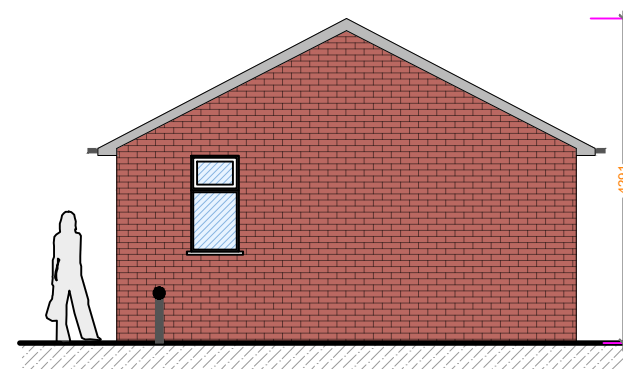
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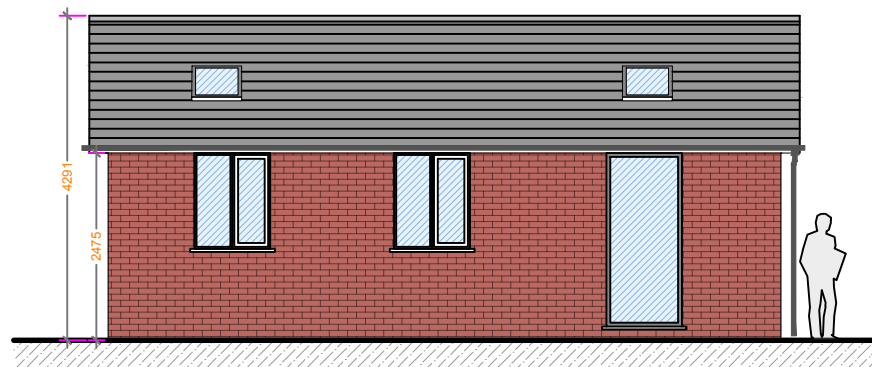
1 Proposed Bungalow Floor Plan
Scale: 1:50



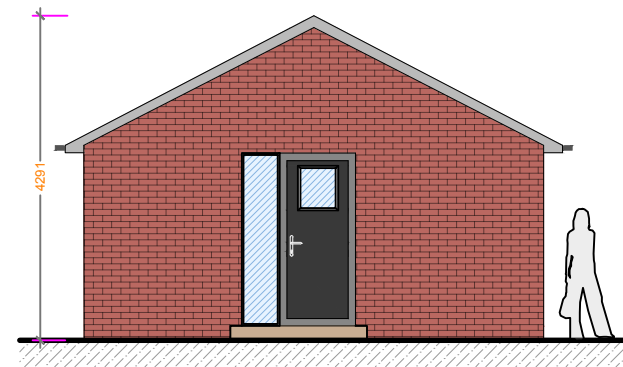
2 Proposed Front Elevation
Scale: 1:100



3 Proposed Side Elevation
Scale: 1:100



4 Proposed Rear Elevation
Scale: 1:100



5 Proposed Side Elevation
Scale: 1:100

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**Proposed Plan
& Elevations**

Drawing No: pln030.03 /

Scale: see drawing @ A3

Issue Date: 05.10.22

Drawn: IS

Checked: --

Revision Notes

Date	Rev	By	Description

0 0.5m 1m 1.5m
Scale 1:50

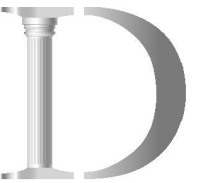
0 1m 2m 3m
Scale 1:100

Notes

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1 Proposed Street Scene Elevation
Scale: 1:100



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Proposed Street
Scene Elevation

Drawing No: pln030.04 /
Scale: 1:100 @ A3
Issue Date: 17.11.22
Drawn: IS
Checked: --

Revision Notes

Date	Rev	By	Description

0 1m 2m 3m
Scale 1:100

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APPENDIX 3

Personal flood plan

Name



Are you signed up to receive flood warnings?

If not call Floodline on 0345 988 1188 to see if your area receives free flood warnings.

☐

Let us know when you've completed your flood plan by calling Floodline on **0345 988 1188**. This will help us learn more about how people are preparing for flooding.

General contact list	Company name	Contact name	Telephone
Floodline	Environment Agency		0345 988 1188
Electricity provider			
Gas provider			
Water company			
Telephone provider			
Insurance company and policy number			
Local council			
Local radio station			
Travel/weather info			

Key locations

Service cut-off	Description of location
Electricity	
Gas	
Water	

Who can help/who can you help?

Relationship	Name	Contact details	How can they/you help?
Relative			
Friend or neighbour			

Be prepared for flooding. Act now

Personal flood plan

What can I do NOW?



Put important documents out of flood risk and protect in polythene

☐

Look at the best way of stopping floodwater entering your property

☐

Find out where you can get sandbags

☐

Identify what you would need to take with you if you had to leave your home

☐

Check your insurance covers you for flooding

☐

Make a flood plan and prepare a flood kit

☐

Identify who can help you/ who you can help

☐

Understand the flood warning codes

☐

What can you do if a flood is expected in your area?

Actions	Location
Home	
● Move furniture and electrical items to safety	
● Put flood boards, polythene and sandbags in place	
● Make a list now of what you can move away from the risk	
● Turn off electricity, water and gas supplies	
● Roll up carpets and rugs	
● Unless you have time to remove them hang curtains over rods	
● Move sentimental items to safety	
● Put important documents in polythene bags and move to safety	
Garden and outside	
● Move your car out of the flood risk area	
● Move any large or loose items or weigh them down	
Business	
● Move important documents, computers and stock	
● Alert staff and request their help	
● Farmers move animals and livestock to safety	
Evacuation - Prepare a flood kit in advance	
● Inform your family or friends that you may need to leave your home	
● Get your flood kit together and include a torch, warm and waterproof clothing, water, food, medication, toys for children and pets, rubber gloves and wellingtons	

There are a range of flood protection products on the market to help you protect your property from flood damage. A directory of these is available from the **National Flood Forum** at www.bluepages.org.uk

Be prepared for flooding. Act now



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