

Flood Risk Assessment (FRA) template

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1 Site description

1.1 Site address

7 The Avenue Worthing West Sussex BN12 6HJ

1.2 Vulnerability classification

More vulnerable (residential extension)

1.3 Flood zone incompatibility

None – the site is in Flood Zone 1 and the proposed development is compatible with this flood zone.

1.4 Lifetime of development

The proposed extension has designed life stage of 100 years and this is not affected by future flood map from 2070-2135

1.5 Local Plan policies and SFRA recommendations

The site is located within Flood Zone 1 and is at low risk of flooding from rivers and the sea. The proposed development is a minor extension to an existing residential property and will not increase flood risk elsewhere. Appropriate surface water drainage measures will be maintained to ensure that runoff is managed effectively.

2 Assess flood risk

2.1 Existing site

The site comprises an existing end of terrace house and associated garden/curtilage. The site is predominantly developed with the existing house, hardstanding areas and landscaped garden. The proposed works relate to an extension to the existing dwelling

2.2 Fluvial flood risk

2.2.1 Design flood event

N/A. The site is within Flood Zone 1 and is not identified as being at risk from fluvial flooding. There is Ferring rife located over 500m away from the site.

2.2.2 Residual fluvial risk

Negligable site has no identified residual fluvial flood risk

2.3 Tidal flood risk

2.3.1 Design flood event

N/A. The site is within Flood Zone 1 and is not identified as being at risk from tidal flooding

2.3.2 Residual tidal risk

Very little to no tidal risk

2.4 Surface water flood risk

2.4.1 Design flood event

There is an area to the west of the site that has a 1% chance of flooding in present day by less than 150mm. The site itself does not fall within this even from 2061-2125 although by the garages nearby this is at risk in the future due to climate change.

2.4.2 Residual risk

The residual risk of surface water flooding is considered to be low. Although localised ponding may occur on nearby roads (Maybridge Square) during extreme rainfall events, the application site remains outside the mapped surface water flood extent and is not considered to be at significant residual risk.

2.5 Sewer flood risk

There are no known records of sewer flooding affecting the site. The development is a minor residential extension and will connect to the existing drainage system. The proposal is not expected to increase sewer flood risk.

2.6 Groundwater flood risk

There are no known groundwater flooding issues affecting the site. Groundwater flood risk is considered low and will not be materially altered by the proposed development.

2.7 Reservoir flood risk

The site is not identified as being at significant risk from reservoir flooding.

2.8 Canals and other artificial sources of flood risk

The site is not identified as being at significant risk from canal flooding.

2.9 Coastal erosion risk implications on tidal flood risk

Flood risk map shows risk of flooding 2070-2135 and this site is not directly affected.

2.10 Interactions of various sources

There are no significant interactions between flood sources that would increase flood risk at the site.

2.11 Design flood level according to all the sources identified

No design flood level applies as the site is not at risk from fluvial or tidal flooding.

2.12 Exception Test

Not applicable. The proposal is located within Flood Zone 1 and the Exception Test is not required.

2.13 Summary of flood risks

The site is located within Flood Zone 1 and is at low risk of flooding from rivers and the sea. Flood risk from surface water, groundwater, sewers, reservoirs and other sources is considered low. The proposed extension will not increase flood risk on or off the site as we will install a soakaway to reduce surface water pooling risk which is the most likely cause of flooding to the surrounding area.

3 Avoid flood risk

3.1 Evidence of the Sequential Test

The proposal is a minor extension to an existing dwelling and therefore the Sequential Test is not required.

3.2 Sequential Approach

The development is located within the area of lowest flood risk and represents an extension to an existing residential property. The proposal accords with the sequential approach by directing development to land at the lowest probability of flooding.

4 Control flood risk

4.1 Proposed site levels

Existing ground levels will remain substantially unchanged. The proposed extension will be constructed at levels consistent with the existing dwelling and no significant changes to site levels are proposed. We are creating a ramp/platform for level access into the property but this will include an aco drain to redirect surface water to the new soakaway.

4.2 Flood flow route

The development will not obstruct any overland flood flow routes or alter existing drainage patterns. The proposal will not increase flood risk on or off the site.

4.3 Existing or proposed flood risk management infrastructure

No formal flood defence infrastructure is required to protect the site. Existing drainage arrangements will be retained and maintained as appropriate.

5 Mitigate flood risk

5.1 Risk to people

The proposed extension does not introduce any significant additional risk to occupants.

5.2 Risk to property/building

Standard construction methods and existing drainage arrangements are considered appropriate. We will avoid using a suspended floor unless it is necessary for ground conditions.

5.3 Risk to essential services

Existing utility services will remain operational and are not considered to be at significant flood risk.

5.4 Floodplain storage and conveyance compensation

Not applicable. The site is not located within the functional floodplain and the proposal will not affect floodplain storage or flood conveyance.

5.5 Surface water management

We will install a soakaway in the rear garden to direct surface water back underground

6. Manage flood risk

6.1 Safe access and escape

Safe access and egress will continue to be available via the existing dwelling entrance. No additional flood risk is anticipated.

6.2 Evacuation plan

Due to the site's location within Flood Zone 1 and the low level of flood risk, a site-specific evacuation plan is not considered necessary.

6.3 Residual flood risk

Residual flood risk is considered to be very low. The proposal will not increase the likelihood or consequences of flooding.

6.4 Betterment provision

The proposal maintains existing drainage arrangements and does not increase flood risk. The development therefore represents a neutral impact on flood risk.

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7. Summary of measures

The works include a soakaway with rainwater pipe and aco drains directing surface water to and we will use a solid ground floor build up providing that ground conditions allow us to do so.