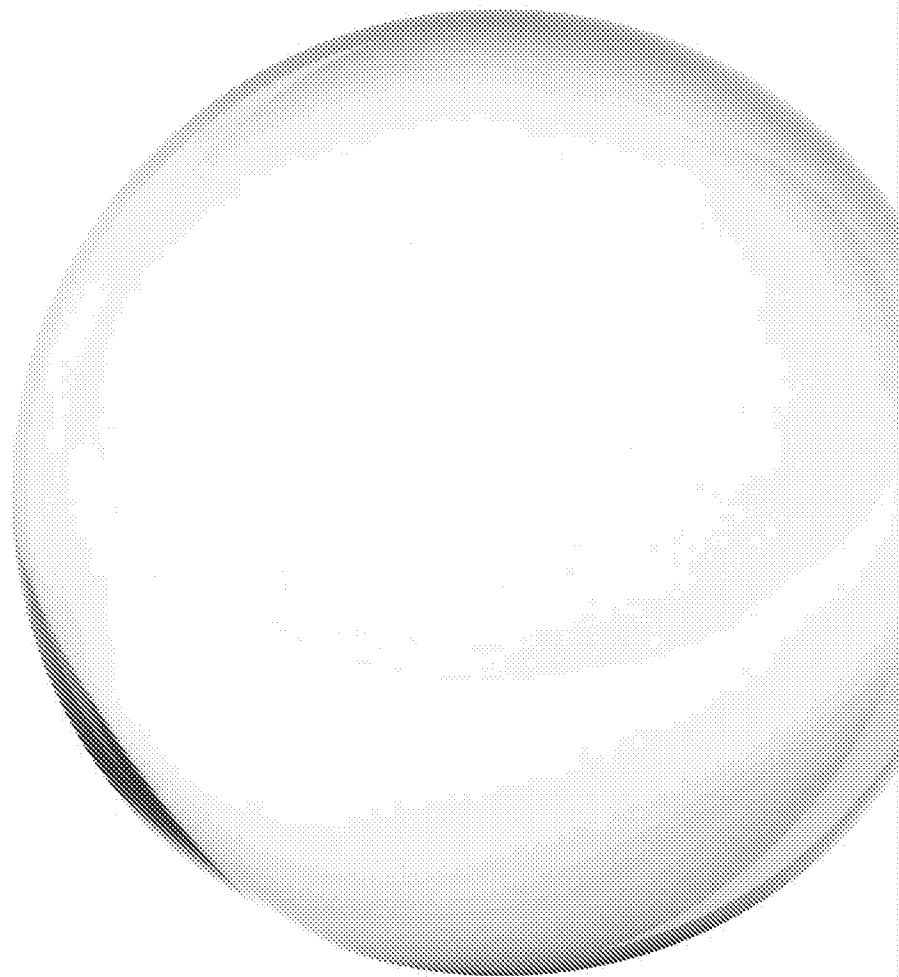




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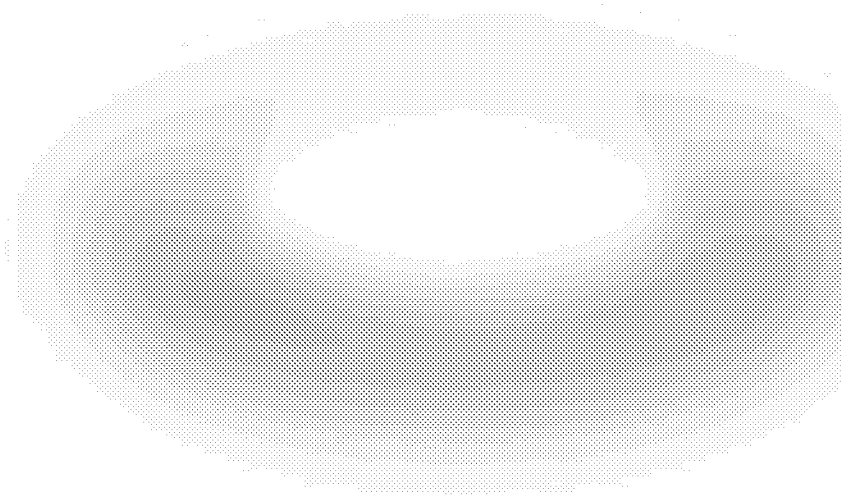
Project: Phase 1 Flood Risk Assessment (FRA)

Prepared for: Caldotec Ltd

Reference: 3796

Date: March 2018

Version: Final v1.0



Document Issue Record

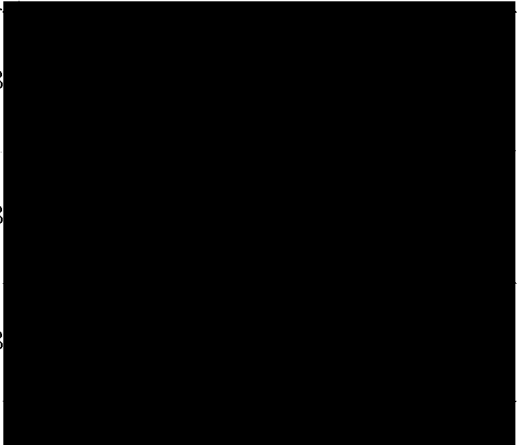
Project: Phase 1 Flood Risk Assessment

Prepared for: Caldotec Ltd.

Reference: 3796

Site Location: 33 Fitzalan Road, Arundel, West Sussex, BN18 9JP

Proposed Development: It is understood that the development is for the construction of a single storey rear extension to provide additional habitable space to the existing residential dwelling on site.

Consultant		Date	Signature
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1. Summary

- 1.1 Ambiental Technical Solutions Limited has been appointed by Caldotec Ltd to undertake a National Planning Policy Framework (NPPF) compliant Flood Risk Assessment (FRA) in support of the proposed development at 33 Fitzalan Road, Arundel, West Sussex, BN18 9JP.
- 1.2 The site currently consists of a single storey residential dwelling (with roof dormers). It is understood that the development is for the construction of a single storey rear extension to provide additional habitable space to the existing residential dwelling on site.
- 1.3 The River Arun (EA Main River) is located approximately 85m west of the proposed development site, at its closest proximity.
- 1.4 According to low detail, national-scale flood mapping created on behalf of the Environment Agency (EA), the redline application of the existing and proposed development resides within Flood Zone 3 (High Risk).
- 1.5 The Arun District Council SFRA has identified Flood Zone 3b (1:20 year event), where detailed modelling exists. In the absence of detailed hydraulic model information, a precautionary approach has been adopted with the assumption that the extent of Flood Zone 3b would be equal to Flood Zone 3a.
- 1.6 **The Arun District Council Strategic Flood Risk Assessment (SFRA) indicates that the proposed development site falls within Flood Zone 3a.**
- 1.7 The existing development is considered “More Vulnerable” under the NPPF. The proposed development is for the construction of an extension to the existing residential dwelling. As such, there will be no change in vulnerability post-development. Furthermore, the proposed extension will be less than 250m² and are therefore considered a Minor Development/ Extension under the NPPF. **As such, the proposed can adhere to the EA Standing Advice for Minor Extensions.**
- 1.8 In line with the relevant standing advice, the FFLs of the proposed extension are to be set no lower than the FFLs of the existing property. The property supports ground floor sleeping accommodation as existing, and will create one new bedroom at this level.
- 1.9 As such, and given that:
 - the site lies within an existing developed area;
 - the site is located in Flood Zone 3a as defined in the Arun DC SFRA (2016);
 - the proposed development is considered a **Minor Development under the NPPF (<250m²)**;
 - FFLs will be set no lower than the existing property in line **with EA Standing Advice** for Minor Developments;
 - in terms of flood vulnerability, significant betterment can be achieved through the implementation of flood warnings procedures and an evacuation plan,

following the guidelines contained within the NPPF, the proposed development is considered **to be suitable** assuming appropriate mitigation (including adequate warning procedures) can be maintained for the temporary lifetime of the development.

Development Description	Existing	Proposed
Development Type:	Single storey dwelling with roof dormers	Construction of extension to provide greater habitable space (<250m ² ; Minor Development)
(Number of Bedrooms):	4	5
EA Vulnerability Classification:	More Vulnerable	No Change
Ground Floor Level:	Topographic levels vary between approximately 1.53mAOD and 2.34mAOD (2m LiDAR)	FFLs of extension to be no lower than existing
Level of Sleeping Accommodation:	Ground Floor	No Change
Impermeable Surface Area:	N/A ¹	Partial increase with built footprint
Surface Water Drainage:	N/A ¹	N/A ¹
Site Size:	Approx. 580m ²	No Change
Risk to Development	Summary	Comment
EA Flood Zone:	Flood Zone 3	Flood Zone 3a as defined by SFRA
Flood Source:	Fluvial/ Tidal	River Arun
1:100 year +CC flood level:	N/A ²	No site-specific data included at time of writing as proposed will adhere to standing advice for minor developments (FFLs no lower than existing)
1:200 year +CC flood level:	N/A ²	
1:1000 year flood level:	N/A ²	
Recorded Flood Events in Area:	No	
Recorded Flood Events at Site:	No	Site outside EA historic flood extents
SFRA Available:	Yes	Arun District Council SFRA (2016)
Management Measures	Summary	Comment
Ground floor level above extreme flood levels:	N/A ¹	FFLs to be set no lower than existing (Minor Development Standing Advice)
Safe Access/Egress Route:	Yes	Internal access to upper floors maintained
Flood Resilient Design:	Yes	Section 7 of this report
Site Drainage Plan:	N/A ¹	N/A ¹
Flood Warning & Evacuation Plan:	Yes	EA Flood Warning Service
Offsite Impacts	Summary	Comment
Displacement of floodwater:	N/A ¹	Minor Development
Increase in surface run-off generation:	N/A ¹	
Impact on hydraulic performance of channels:	None	

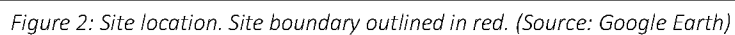
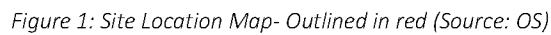
Table 1: Summary of flood risks, impacts and proposed flood mitigation measures.

N/A¹ not required for this assessment; N/A² data not available.

2. Development Description and Site Area

Proposed Development and Location

2.1 The proposed development is located at 33 Fitzalan Road, Arundel, West Sussex, BN18 9JP (Figures 1 & 2).



- 2.3 The site currently consists of a single storey residential dwelling (with roof dormers). It is understood that the development is for the construction of a single storey rear extension to provide additional habitable space to the existing residential dwelling on site.
- 2.4 As such the proposed development is considered a Minor Development under the NPPF and can adhere to the EA Standing Advice for such.
- 2.5 Based on 2m LiDAR, topographic levels across the site vary between approximately 1.53mAOD and 2.34mAOD.

Vulnerability classification

- 2.6 As shown in *Figure 3*, the site is located in Flood Zone 3 (High Risk of flooding).
- 2.7 The existing development is considered “More Vulnerable” under the NPPF. The proposed development is for the construction of an extension to provide greater habitable space to the existing residential dwelling. As such, there will be no change in vulnerability post-development. Furthermore, the proposed extension will be less than 250m² and are therefore considered a Minor Development/ Extension under the NPPF. As such, the proposed can adhere to the EA Standing Advice for Minor Extensions.

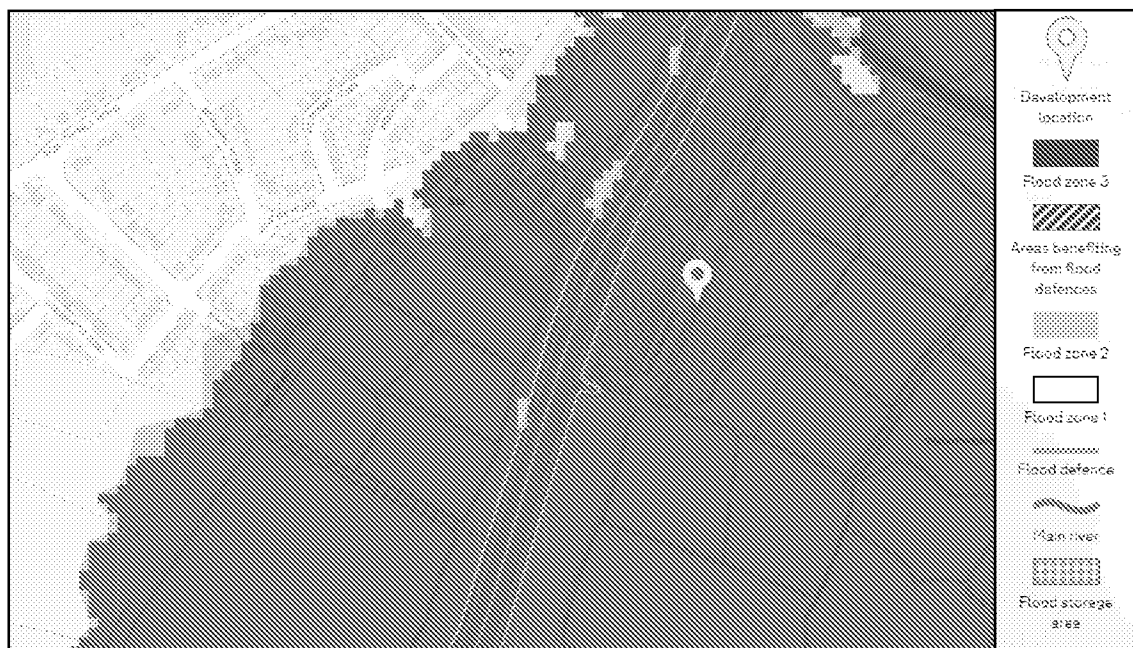


Figure 3: EA Flood Map for Planning (Source: EA)

Geology

- 2.8 According to the British Geological Survey (BGS) the bedrock of the site is of the Spetisbury Chalk Member, comprised of chalk. The BGS data also indicates that superficial deposits at the site are Raised Marine Deposits, comprised of clay, silt sand and gravel.

3. Sequential Test/Exception Test

- 3.1 Under the NPPF, all new planning applications must undergo a *Sequential Test*. This test must be implemented by local planning authorities with a view to locating particularly vulnerable new developments (e.g. residential, hospitals, mobile homes etc.) outside of the floodplain. The test refers to the EA Flood Zones described in Table 4. For reference, the NPPF *Sequential Test: Flood Risk Vulnerability and Flood Zone 'Compatibility' Table* is reproduced below.
- 3.2 The existing residential development is classified as “More Vulnerable” under NPPF guidance. The site will continue to be classified as “More Vulnerable” as the proposed development is for

the construction of extensions to the existing dwelling, and considered a Minor Development under the NPPF.

Flood Risk Vulnerability Classification		Essential Infrastructure	Water Compatible	Highly Vulnerable	More Vulnerable	Less Vulnerable
Flood Zone	Zone 1	✓	✓	✓	✓	✓
	Zone 2	✓	✓	Exception Test Required	✓	✓
	Zone 3a	Exception Test Required	✓	✗	Exception Test Required	✓
	Zone 3b Functional Floodplain	Exception Test Required	✓	✗	✗	✗

Table 2: The Sequential Test: Flood Risk Vulnerability and Flood Zone 'Compatibility' Table as specified by NPPF. Shaded cells denote the proposed re-development. Please note: ✓ means development is appropriate; ✗ means the development should not be permitted.

- 3.3 Using the principles of the Sequential Test outlined above, the proposed development is "More Vulnerable". The site is located within Flood Zone 3 (as defined by the EA) and therefore under the NPPF and EA guidance, this development requires the implementation of the Exception Test.
- 3.4 However, under the NPPF, the Sequential Test does not need to be applied for developments of change of use or **Minor Development**. As discussed, the proposed development is for the construction of an extension to the existing residential dwelling on site (<250m²) to provide greater habitable space. As such, the proposed is considered a Minor Development under the NPPF and is not required to be subject to the Sequential Test.
- 3.5 As the site resides within Flood Zone 3, the planning application submitted by the client is required to be accompanied by a FRA which shows that the development can be achieved in a sustainable manner, with an overall reduction of flood risk to the site and surrounding area.

4. Site Flood Hazards

Sources of Flooding

- 4.1 As outlined in Figure 3, the proposed development is located within Flood Zone 3 (High Risk of flooding) and is considered to be "More Vulnerable" under the NPPF. Communication with the Environment Agency (EA) and a review of the Arun District Council SFRA has identified the following potential sources of flooding to the site:

Source	Description

Fluvial/ Tidal	River Arun
Surface	N/A
Groundwater	Potentially On Site
Sewer	Local Sewer Network

Table 3: Summary of flood sources.

Mechanisms and History of Flooding

- 4.2 According to the low detail, national-scale flood mapping created on behalf of the EA, the proposed development is located within Flood Zone 3. Figure 3 outlines only the potential floodplain; and the mitigating effects of flood defences currently in place are not considered.

Fluvial/ Tidal

- 4.3 The proposed development site lies within Flood Zone 3 (both fluvial and tidal influenced). Fluvial Flood Zone 3 has a greater than 1:100 probability of annual flooding, while Tidal Flood zone 3 has a greater than 1:200 probability of annual flooding.
- 4.4 The River Arun (EA Main River) is located approximately 85m west of the proposed development site, at its closest proximity.
- 4.5 The Arun District Council SFRA has identified Flood Zone 3b (1:20 year event), where detailed modelling exists. In the absence of detailed hydraulic model information, a precautionary approach has been adopted with the assumption that the extent of Flood Zone 3b would be equal to Flood Zone 3a.
- 4.6 **The Arun District Council Strategic Flood Risk Assessment (SFRA) indicates that the proposed development site falls within Flood Zone 3a (Figure 4).**

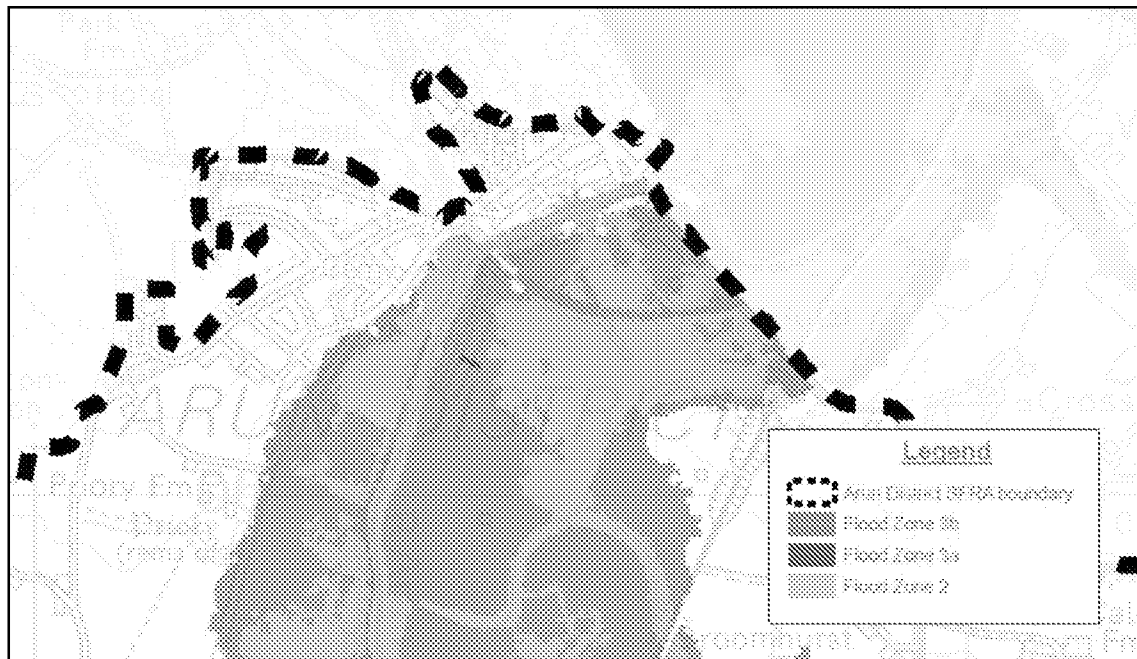


Figure 4: Flood Zones (Source: Arun DC SFRA, 2016)

- 4.7 The proposed development is located in Flood Zone 3a as defined by the Arun SFRA (2016).
- 4.8 It is understood that the development is for the construction of a single storey rear extension to provide additional habitable space to the existing residential dwelling on site. **As such the proposed development is considered a Minor Development under the NPPF and can adhere to the EA Standing Advice for such.**
- 4.9 As such, the risk of flooding from tidal sources is considered **moderate**, however the proposed development is for the extension of the existing use, and is therefore considered a Minor Development under the NPPF (<250m²) and will have FFLs set no lower than existing in line with the EA Standing Advice for Minor Developments.

Surface Water (Pluvial)

- 4.10 The EA Risk from Surface Water Flooding Map (Figure 5) demonstrates that the proposed development site is at a “Very Low” risk of surface water flooding with a less than 1:1000 annual probability of flooding from surface water sources.

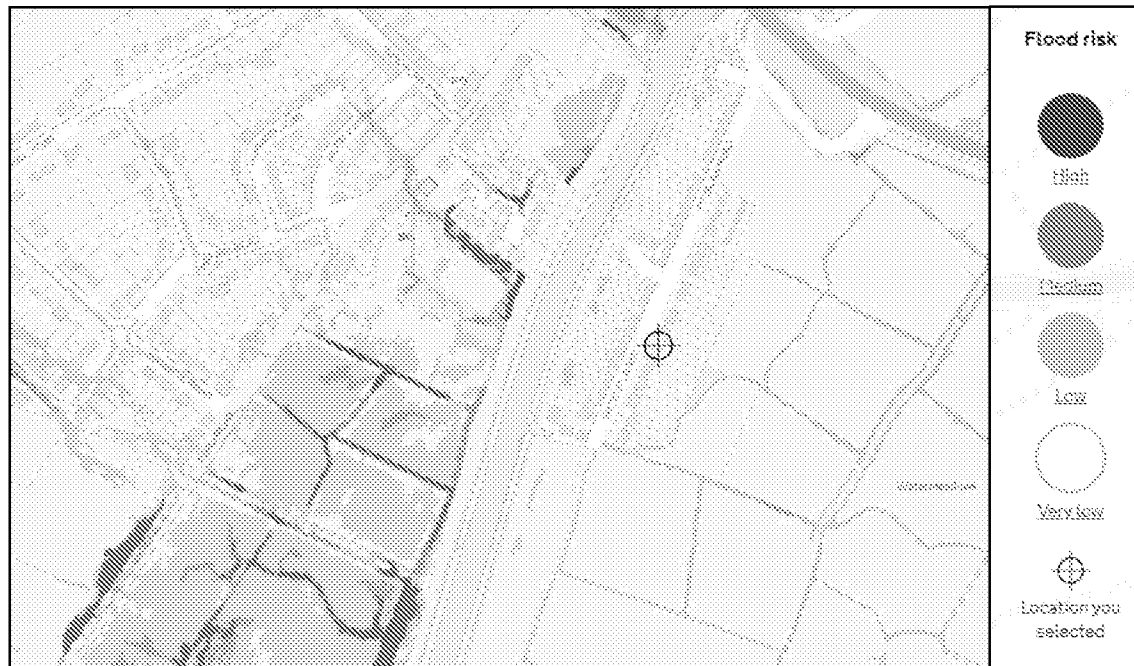


Figure 5: Surface Water Flood Risk (Source: EA)

4.11 Appendix H of the Arun DC SFRA (2016) maps records of historic flooding across the district from various sources. There have been no recorded incidents of surface water flooding within the vicinity of the proposed development site.

4.12 The risk of flooding from surface water sources is therefore considered to be **relatively low**.

Groundwater

4.13 The EA has not identified the site to be located within a Groundwater Protection Zone. However, the site has been shown to be located in an area of Medium-High groundwater vulnerability (Figure 6).

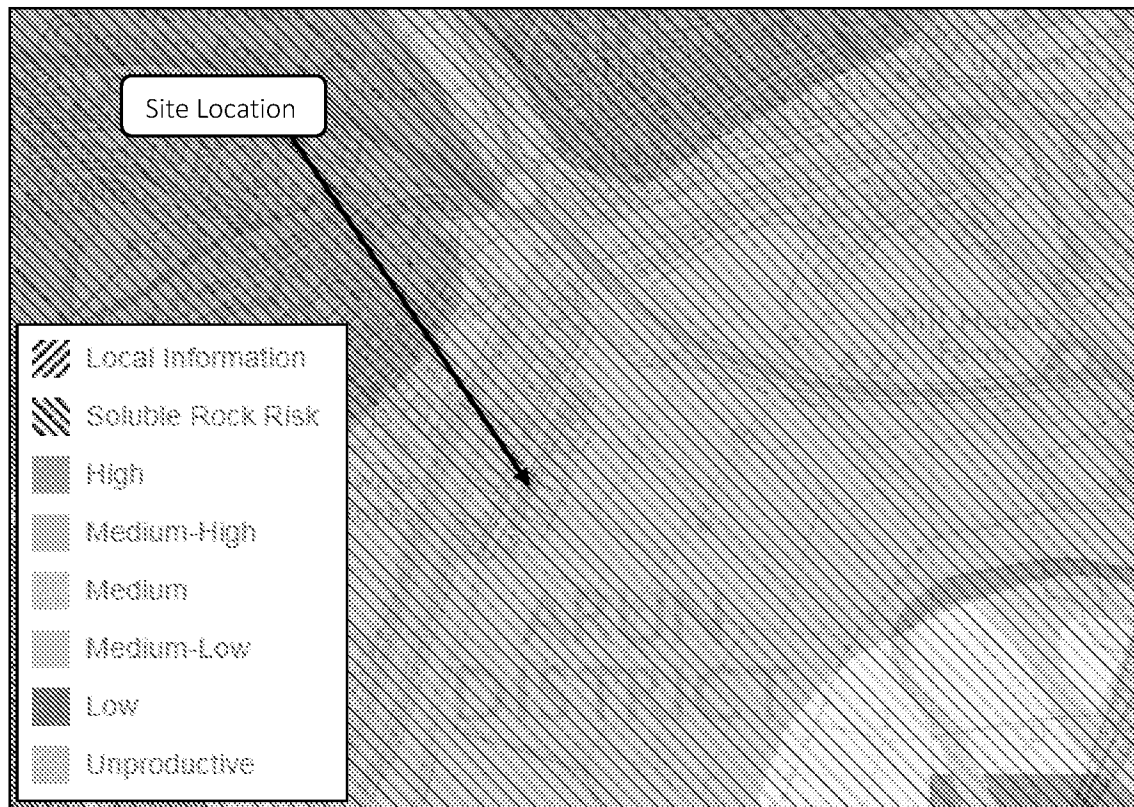


Figure 6: Groundwater Vulnerability Map (Source: EA)

4.14 Appendix F of the Arun DC SFRA (2016) maps areas susceptible to groundwater flooding across the district. It indicates that over 75% of the 1km grid square that the site is located in is susceptible to groundwater flooding.

4.15 Appendix H of the Arun DC SFRA (2016) maps records of historic flooding across the district from various sources. There have been no recorded incidents of groundwater flooding within the vicinity of the proposed development site.

4.16 As such, the risk of flooding from this source can be considered to be **moderate**.

Sewer

4.17 Table 5-2 of the Arun DC SFRA (2016) details recorded flood incidents from sewer sources across the district based on data from February 2016.

4.18 Based on this data, there had been 8 recorded incidents of sewer flooding within the BN18 9 postcode area.

4.19 The location of these incidents with regard to the proposed development site is unknown. As such, no records have been found to indicate that the site has flooded from sewer sources previously.

4.20 As such, the risk of sewer flooding to the site is considered to be **relatively low to moderate**.

4.21 Any new sewer connection on site should be agreed with the local sewer provider and fitted with a non-return valve to mitigate the risk of flooding from sewers.

Surface Water Drainage Strategy

- 4.22 A review of satellite imagery and plans provided by the client indicate that the proposed rear extension will be partially constructed on a paved area. However, it is understood that the proposed extension will also be partially constructed atop a soft landscaped area. As such there will likely be an increase in impermeable surfaces on site, resulting increased runoff rates.
- 4.23 However, given that the proposed is considered a Minor Development (<250m²) the impact on the surface water regime could be considered negligible.
- 4.24 The Arun DC SFRA (2016) does state that developers should ensure that new development does not increase the surface water runoff rate from the site. This should be considered by the developer.
- 4.25 Infiltration SuDS could be utilised given the underlying geology, however this should be confirmed with BRE 365 infiltration tests. If infiltration rates are not favourable, surface water could be discharged into the nearby ordinary watercourse network east of the site. If these are tidally dominated, surface water can usually be discharged at an unrestricted rate (although connection should be agreed with the local drainage board). If the ordinary watercourses are fluvially dominated, discharge rates are usually restricted to greenfield (or as close to as possible).

Records of Historical Flooding

- 4.26 The proposed development site is located outside the recorded historical flood extents provided by the EA.
- 4.27 Appendix H of the Arun DC SFRA (2016) maps records of historic flooding across the district from various sources. There was a fluvial incident approximately 130m north of the proposed development site, however it is unknown whether the site itself was affected during this event.
- 4.28 No other events have been found to indicate historic flooding within the proximity of the site.

5. Probability of Flooding

- 5.1 According to the low detail, national-scale flood mapping created on behalf of the EA the probability of tidal flooding at the site is greater than 1 in 200 annually (>0.5% chance of tidal flooding each year) while the probability of fluvial flooding at the site is greater than 1 in 100 annually (>1% chance of fluvial flooding each year).
- 5.2 This information is supported by the EA Flood Map for Planning (Figure 3) which has been produced in part using JFLOW/HYDRO-F – a relatively coarse, national scale flood modelling strategy and in part using detailed flood models. These maps indicate the potential spatial extent of a tidal flood event which has a magnitude that is, on average, likely to occur once in every two hundred years (i.e. the 1:200 year tidal floodplain). It is important to note that only the *potential* floodplain is shown; ***the mitigating effects of any flood defences currently in place are not considered***. For reference, the definition of the NPPF flood risk zones is included below in Table 4.

Zone	Description
1	Low Probability. This zone comprises land assessed as having a less than 1 in 1000 annual probability of river or sea flooding in any year (<0.1%).
2	Medium Probability. This zone comprises land assessed as having between a 1 in 100 and 1 in 1000 annual probability of river flooding (1% – 0.1%) or between a 1 in 200 and 1 in 1000 annual probability of sea flooding (0.5% – 0.1%) in any year.
3a	High Probability. This zone comprises land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%) or a 1 in 200 or greater annual probability of flooding from the sea (>0.5%) in any year.
3b	The Functional Floodplain. This zone comprises land where water has to flow or be stored in times of flood. SFRA's should identify this Flood Zone (land which would flood with an annual probability of 1 in 20 (5%) or greater in any year or is designed to flood in an extreme (0.1%) flood, or at another probability to be agreed between the LPA and the EA, including water conveyance routes).

Table 4: Definition of the NPPF Flood Zones. Shaded cells denote the proposed development. (Source: EA)

Climate Change on Site

- 5.3 Climate change is likely to increase the flow in rivers, and raise sea levels and storm intensity.
- 5.4 No site-specific EA data was included at the time of writing given that the proposed development is a Minor Development under the NPPF as can adhere to the EA Standing Advice for such developments (FFLs no lower than existing property).
- 5.5 As such, the true impacts of climate change on the fluvial/ tidal risk to the property cannot be quantified at the time of writing. However with increased rainfall intensity and sea level rise the property will likely be at an increased risk of flooding from fluvial/ tidal sources with the impacts of climate change.

6. Residual Risks

- 6.1 Residual risks are those remaining after applying the sequential approach to the location of development and taking mitigating actions. Examples of residual flood risk include:
- the failure of flood management infrastructure such as a breach of a raised flood defence, blockage of a surface water conveyance system, overtopping of an upstream storage area, or failure of a pumped drainage system;
 - failure of a reservoir, or;
 - a severe flood event that exceeds a flood management design standard, such as a flood that overtops a raised flood defence, or an intense rainfall event which the drainage system cannot cope with.
- 6.2 The site is located within Flood Zone 3 (High Risk). The EA Flood Map for Planning indicates that there are defences along the River Arun as it flows through Arundel. It is understood these provide a 1:75 year standard of protection. No data relating to defence breach has been provided at the time of writing. As the proposed is a Minor Development, the change in risk from defence breach is negligible.
- 6.3 The proposed development site is located outside the EAs modelled maximum flood extent following reservoir failure.
- 6.4 Drainage failure remains a residual risk. Any new sewer connection on site should be agreed with the local sewer provider and fitted with a non-return valve to mitigate the risk of flooding from sewers. In addition, to mitigate against drainage exceedance events, the external entry thresholds should be raised 150mm above external ground levels where possible.

7. Flood Risk Management Measures

- 7.1 The site resides in Flood Zone 3 (High Risk of flooding as defined in the NPPF) according to the EA Flood Map for Planning, and as such the proposed development will require flood mitigation measures.
- 7.2 The proposed development is for the construction of an extension to the existing residential dwelling. The proposed extension will be less than 250m² and is therefore considered a Minor Development/ Extension under the NPPF. As such, the proposed can adhere to the EA Standing Advice for Minor Extensions.
- 7.3 The EA Standing Advice for Minor Extensions notes that FFLs should either be no lower than the existing or 300mm above the estimated flood level.
- 7.4 In line with the relevant standing advice, the FFLs of the proposed extensions are to be set no lower than the FFLs of the existing property.
- 7.5 The property supports ground floor sleeping accommodation as existing, and will create one new bedroom at this level. No new sleeping accommodation will be created at a level lower than the existing property.
- 7.6 It is recommended the proposed development incorporates the following flood mitigation measures:
- All floors to be finished with waterproof screed;
 - Internal render to be waterproof;
 - FFLs of the proposed extensions to be set no lower than existing property;
 - All plumbing insulation to be of closed-cell design.
 - Non-return valves to be fitted to all drain and sewer outlets; and,

Flood Evacuation Plan

- 7.7 The proposed development site is located within an EA Flood Warning Service Area (*Figure 7*).
- 7.8 Given that the site resides within Flood Zone 3, as a precautionary measure a route of escape should be communicated to all residents so as to enable evacuation from the site in the event of a flood warning (*Figure 8*).
- 7.9 An evacuation route should be formalised and communicated to all users and residents of the site. The evacuation route should be agreed with the Emergency Planners.



Figure 7: EA Flood Warning Area Map (Source: EA)

7.10 The EA operates a 24-hour telephone service on 0345 988 1188 that provides frequently updated flood warnings and associated floodplain information. Further information can be found on www.environment-agency.gov.uk/floodline. Floodline Warnings Direct is a free service operated by the EA that provides flood warnings direct to occupants by telephone, mobile phone, fax or pager.

On receipt of a **FLOOD ALERT**, the owners/occupiers of the property should:

- Monitor the situation via local media;
 - Make themselves aware of forecast local weather conditions;
 - Alert others resident in the property of the situation;
 - Prepare to evacuate if necessary.
- On receipt of a **FLOOD WARNING**, the owners/occupiers of the property should:
 - Follow advice to “go in, stay in, and tune in”;
 - Be prepared to follow instruction from the Emergency Services.
- On receipt of a **SEVERE FLOOD WARNING**, the owners/occupiers of the properties should:
 - Follow advice to “go in, stay in, and tune in”;

- Remain attentive to local media forecasts and news bulletins;
- Do not evacuate unless instructed to do so by the Emergency Services;
- Only when instructed to evacuate by the Emergency Services, leave the property and follow the agreed evacuation route.

7.11 Escape should only be attempted in the event of a flood warning being issued, and prior to a flood event.

7.12 It is the responsibility of the site owner(s) to keep the route known to all residents.

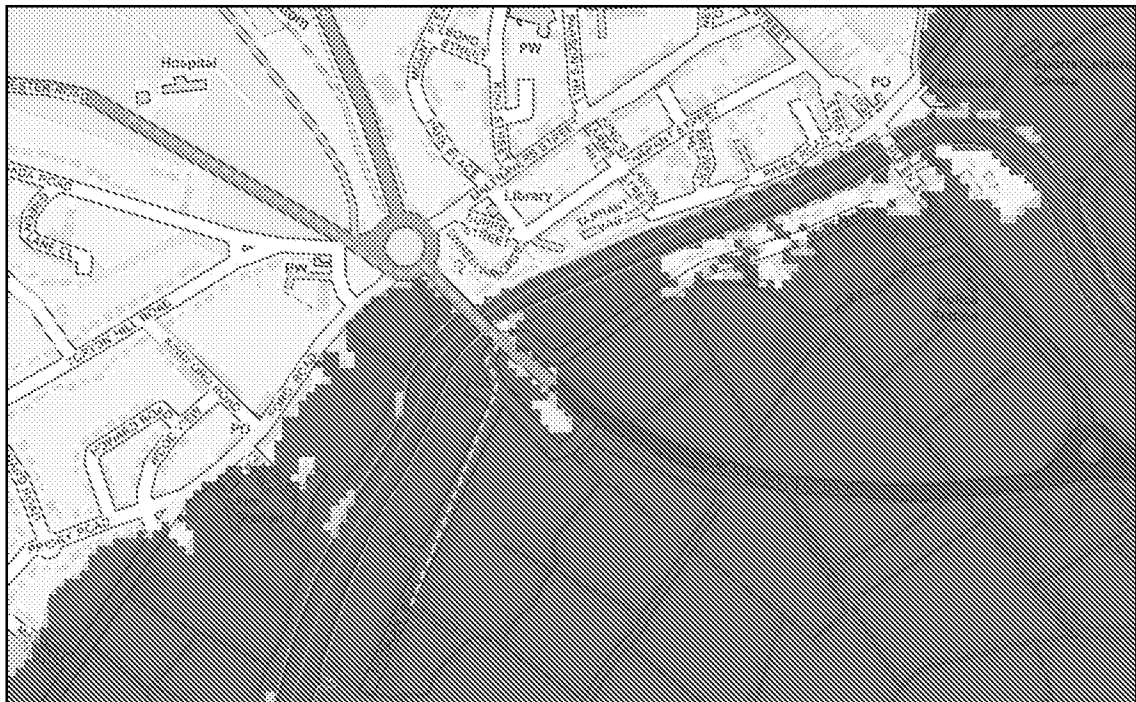


Figure 8: Flood Evacuation Route. Flood Zone 2 shown in light blue and Flood Zone 3 shown in dark blue. Proposed evacuation route shown as green dashed line (Sources: OS, EA)

Safe Refuge

- 7.13 Occupants should only evacuate the property in the event of a flood warning. If flooding is evident then occupants should remain on the upper floors of the property unless advised to do so by emergency services.
- 7.14 If flood waters have exceed 25cm along the proposed evacuation route when attempting to evacuate, site users and occupants should remain within the upper floors of the development.
- 7.15 When flood waters have receded, (or when informed to do so by the emergency services) site users and occupants should evacuate the site.

8. Off Site Impacts

Impact to Flood Risk Elsewhere

- 8.1 The site currently consists of a single storey residential dwelling (with roof dormers). It is understood that the development is for the construction of a single storey rear extension to provide additional habitable space to the existing residential dwelling on site.
- 8.2 As such, it can be considered a **minor development** under the NPPF, and an extension of the existing use.
- 8.3 As such, the proposed development is not required to provide compensatory storage.

Generation of Runoff

- 8.4 A review of satellite imagery and plans provided by the client indicate that the proposed rear extension will be partially constructed on a paved area. However, it is understood that the proposed extension will also be partially constructed atop a soft landscaped area. As such there will likely be an increase in impermeable surfaces on site, resulting increased runoff rates.
- 8.5 However, given that the proposed is considered a Minor Development (<250m²) the impact on the surface water regime could be considered negligible.
- 8.6 The Arun DC SFRA (2016) does state that developers should ensure that new development does not increase the surface water runoff rate from the site. This should be considered by the developer.
- 8.7 Infiltration SuDS could be utilised given the underlying geology, however this should be confirmed with BRE 365 infiltration tests. If infiltration rates are not favourable, surface water could be discharged into the nearby ordinary watercourse network east of the site. If these are tidally dominated, surface water can usually be discharged at an unrestricted rate (although connection should be agreed with the local drainage board). If the ordinary watercourses are fluvially dominated, discharge rates are usually restricted to greenfield (or as close to as possible).

9. Conclusion

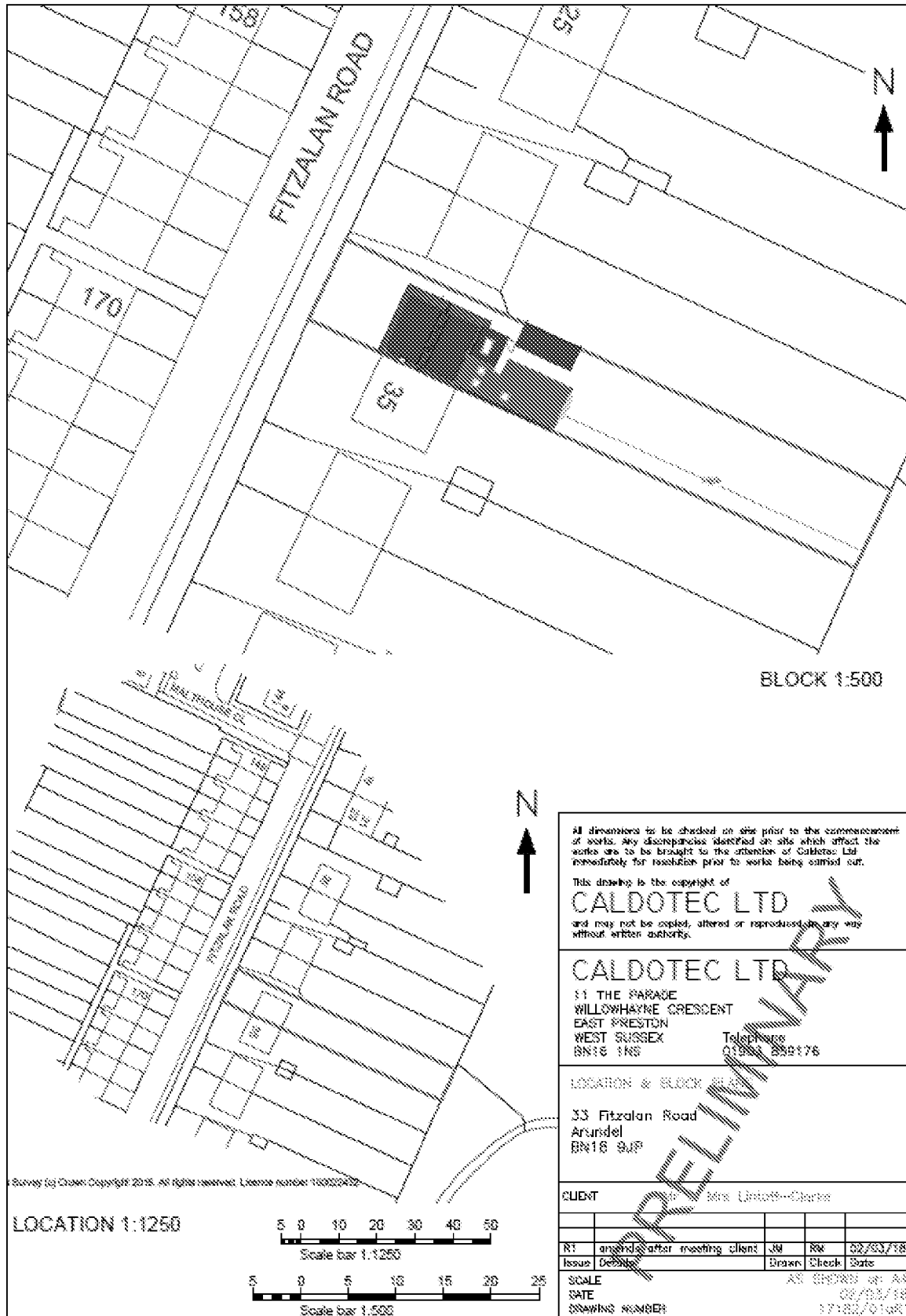
- 9.1 Ambiantal Technical Solutions Limited has been appointed by Caldotec Ltd to undertake a National Planning Policy Framework (NPPF) compliant Flood Risk Assessment (FRA) in support of the proposed development at 33 Fitzalan Road, Arundel, West Sussex, BN18 9JP.
- 9.2 The site currently consists of a single storey residential dwelling (with roof dormers). It is understood that the development is for the construction of a single storey rear extension to provide additional habitable space to the existing residential dwelling on site.
- 9.3 The River Arun (EA Main River) is located approximately 85m west of the proposed development site, at its closest proximity.
- 9.4 According to low detail, national-scale flood mapping created on behalf of the Environment Agency (EA), the redline application of the existing and proposed development resides within Flood Zone 3 (High Risk).
- 9.5 The Arun District Council SFRA has identified Flood Zone 3b (1:20 year event), where detailed modelling exists. In the absence of detailed hydraulic model information, a precautionary approach has been adopted with the assumption that the extent of Flood Zone 3b would be equal to Flood Zone 3a.
- 9.6 **The Arun District Council Strategic Flood Risk Assessment (SFRA) indicates that the proposed development site falls within Flood Zone 3a.**
- 9.7 The existing development is considered “More Vulnerable” under the NPPF. The proposed development is for the construction of an extension to the existing residential dwelling. As such, there will be no change in vulnerability post-development. Furthermore, the proposed extension will be less than 250m² and are therefore considered a Minor Development/ Extension under the NPPF. **As such, the proposed can adhere to the EA Standing Advice for Minor Extensions.**
- 9.8 In line with the relevant standing advice, the FFLs of the proposed extension are to be set no lower than the FFLs of the existing property. The property supports ground floor sleeping accommodation as existing, and will create one new bedroom at this level.
- 9.9 As such, and given that:
 - the site lies within an existing developed area;
 - the site is located in Flood Zone 3a as defined in the Arun DC SFRA (2016);
 - the proposed development is considered a **Minor Development under the NPPF (<250m²)**;
 - FFLs will be set no lower than the existing property in line **with EA Standing Advice** for Minor Developments;
 - in terms of flood vulnerability, significant betterment can be achieved through the implementation of flood warnings procedures and an evacuation plan,

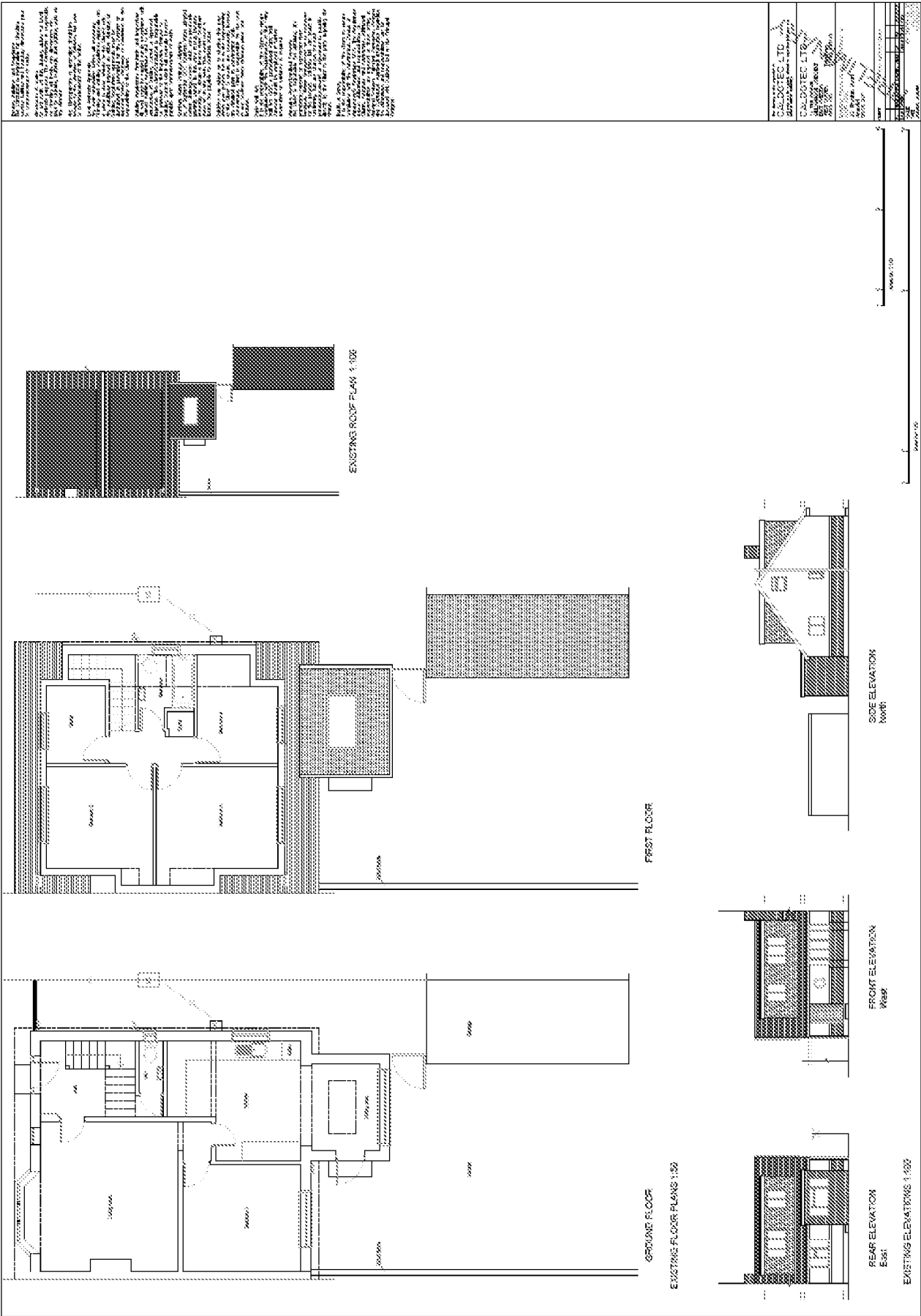
following the guidelines contained within the NPPF, the proposed development is considered **to be suitable** assuming appropriate mitigation (including adequate warning procedures) can be maintained for the temporary lifetime of the development.

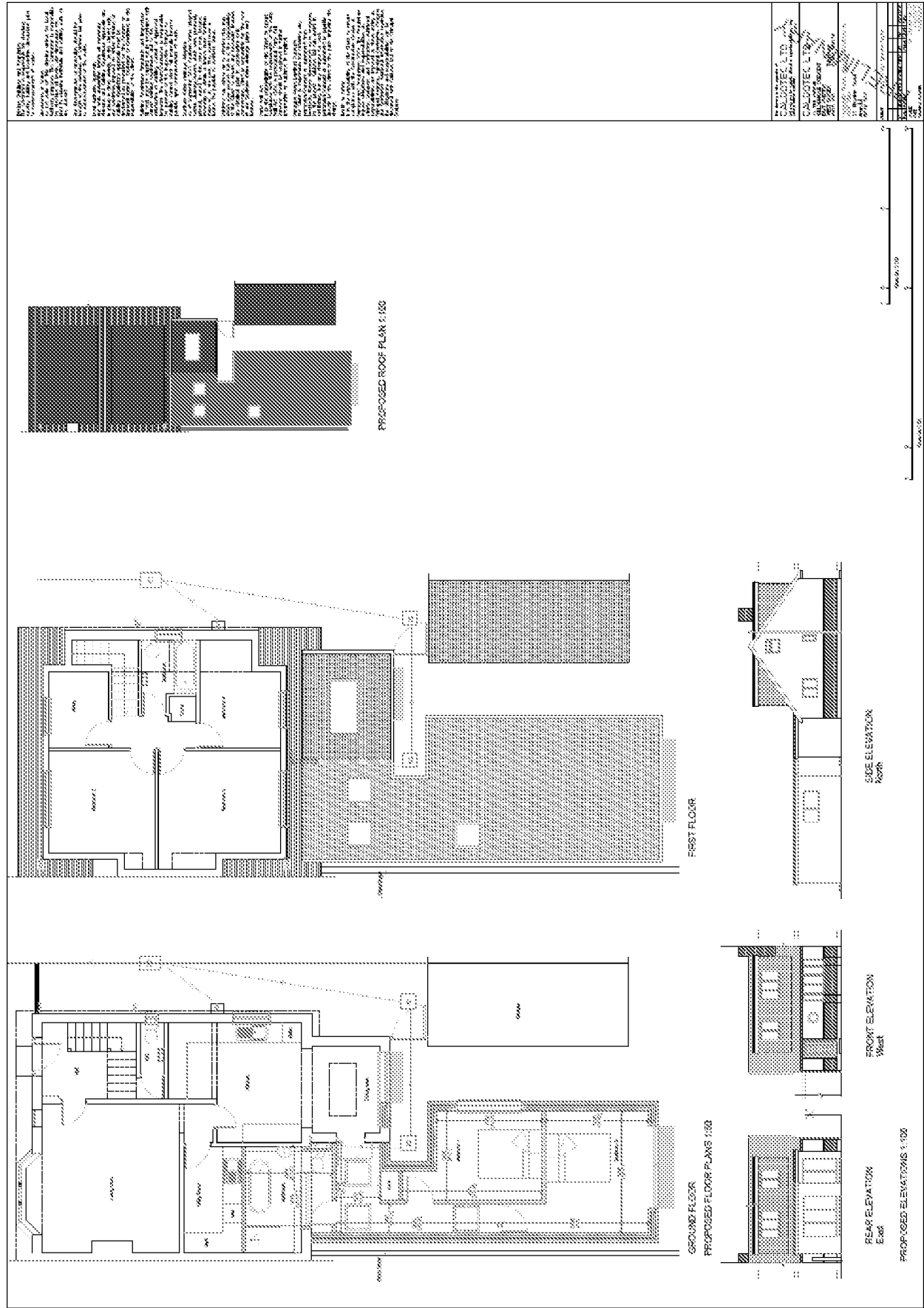
Ambiantal Technical Solutions Ltd

March 2018

Appendix A – Site Plans







Appendix B – SFRA Information

