BERNESLAI HOMES

PROPOSED REFURBISHMENT OF TRAVELLERS SITE AT SMITHIES, BARNSLEY

FLOOD RISK ASSESSMENT

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BARNSLEY
Metropolitan Borough Council

Cannon
Highways Limited

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APPENDICES

FLOOD RISK ASSESSMENT FOR PROPOSED REFURBISHMENT OF TRAVELLERS SITE AT SMITHIES, BARNSLEY

A) INTRODUCTION

Cannon Highways Limited are appointed by Barnsley MBC to carry out a Flood Risk Assessment for their proposals to refurbish and extend their existing Travellers Site at Smithies. The assessment follows the guidance of Planning Policy Statement 25, "Development and Flood Risk" (PPS25). In accordance with the guidance the assessment considers the flood risk issues relating to the proposed development by identifying the risks of flooding to the site and the impact that the development would have on existing flooding mechanisms both at the site and elsewhere.

The assessment uses information obtained from various sources including the Environment Agency and Barnsley MBC. A walkover survey of the site has also been carried out and the observations incorporated into the findings.

B) FLOOD RISK ASSESSMENT

1.0 PROPOSED DEVELOPMENT

1.1 Location

1.1.1 The site is situated on the east side of the River Dearne valley in the Borough of Barnsley approximately 1.5 km to the north of the town, off Smithies Lane. The location and approximate extent of the site is shown on the Location Plan (Plan A) at Appendix A to this report.

1.1.2 The River Dearne is located to the southwest of the site following a path that flows approximately from northwest to southeast.

1.1.3 Directly south of the site there is a reservoir.

1.1.4 To the east of the site is Smithies Council Depot and to the north is open ground.

1.2 Description of the Site

1.2.1 The site, which measures some 1.538 hectares, is situated on a flat plateau built on an embankment approximately 100 metres to the northeast of the River Dearne.

1.2.2 A topographical survey showing the existing layout of the site is contained in Appendix A to this report.

1.2.3 The elevation of the site ranges from approximately 51metres above Ordnance Datum in the north east to approximately 48 metres above Ordnance Datum in the southwest.

1.2.4 An earth bund extends along the southern and western boundaries of the site. The top of the bund is located at an elevation of approximately 50 metres above Ordnance Datum. The bund provides flood protection to the site up to an elevation of 50 metres above Ordnance Datum. It also prevents run-off from the site flowing directly to the river and surrounding watercourses.

1.2.5 The site is elevated approximately 5 metres above the banks of the River Dearne, which flows past the site in a northwest to southeast direction.

1.2.6 At the base of the embankment on which the existing site is built there is a watercourse to the west of the site. The watercourse discharges to a reservoir, which is located immediately to the south of the site. The banks of the reservoir are some 4 metres below the level of the site.

1.2.7 Sectional profiles drawings showing the elevation of the site relative to the surrounding land, the river Dearne and the reservoir, are contained in Appendix A.

1.2.8 The existing use of the land is for a Travellers Site. The facility comprises 28 permanent pitches, which are fully serviced with water, drainage and electricity. The pitches accommodate a mixture of caravans and mobile homes. Permanent single storey buildings provide kitchen and sanitary facilities for each pitch.

1.2.9 The existing pitches and roadways are hard paved and occupy approximately 50% of the site. The remainder of the site is grassed. Impermeable surface accounts for some 0.718 hectares of total site area of 1.538 hectares. The layout and extent of the existing impermeable areas is shown on Plan A at Appendix A to this report.

1.2.10 The development proposals are to refurbish and extend the existing Travellers Site to provide improved facilities and additional pitches. Details of the development proposals are set out in 6.0 of this report.

1.2.11 Plan B, showing the layout of the proposed development and the relative areas of permeable/impermeable surface, is contained in Appendix A of this report. A comparison of the proposed permeable/impermeable areas relative to the existing layout is set out in 3.4.1.

1.2.12 Access to the Site

1.2.12.1 A paved road provides access to the site for both pedestrians and vehicular traffic. The road, which is some 190 metres in length, connects the southeast corner of the site with Smithies Lane. The access road follows an alignment between the reservoir to the west and the Council Depot to the east. The road also provides access to a public household waste recycling facility, which is located within the curtilage of the Council Depot, to the south of the site. A network of internal access roads provide for movement within the site.

1.2.12.2 The access road rises from an elevation of approximately 47.0 metres AOD at the junction of Smithies Lane to 49.5 metres AOD where it enters the site.

1.2.12.3 The road is kerbed on both sides and run-off is intercepted by a series of gullies along the western edge of the carriageway. The gullies appear to discharge directly to the reservoir via individual connections.

1.3 Vulnerability Criteria

1.3.1 Table D.2 of PPS25 identifies the appropriate Vulnerability Classification associated with a range of proposed development land use types.

1.3.2 The proposed development, which meets the criteria for "*Gypsy and traveller sites using caravans and mobile homes*", is classified "Highly Vulnerable".

1.3.3 This means that the proposed development land use is incompatible with land in Flood Zones 3a and 3b. Additionally, it is suitable in land designated as Flood Zone 2 only on successfully meeting the requirements of the sequential/exception test procedure as set out in PPS25.

1.4 Local Development Plans

1.4.1 Compatibility of the Development with Local Plans

1.4.1.1 The use of the site, which would not be changed by the proposals, is compatible with the current Local Development Documents.

1.4.1.2 The local Urban Development Plan, which was adopted in December 2000, acknowledges the use of the site and, in Policy H10, allocates it for continued use to provide accommodation for travellers. The policy document recognises that the location of the site is appropriate for this use, it being located on the edge of the built up area, easily assessible for utilities, schools and other public facilities.

1.4.1.3 This policy is reflected in subsequent local planning proposals. The policy is re-stated in the Local Development Framework Preferred Options that were published for consultation in 2005. The Core Strategy – Revised Preferred Options, published in 2009, continues to recognise the use allocation for the site and the need for additional accommodation of this type in the Borough to meet current and future demand.

1.4.2 Sequential/Exception Test (PPS 25)

1.4.2.1 The Sequential Test is required for this development because the site is currently within an area designated by the Environment Agency at Flood Zone 2.

1.4.2.2 The Sequential Test can be considered to have been passed because the proposed development: -

- is not a change to the use of the existing site; And
- is consistent in scale, development type and location with the allocation in the Local Development Document.

1.4.2.3 The current flood zone designation is not compatible with the existing/proposed use of the site. The current Flood Zone designation has been challenged. However, until a decision has been made on that challenge, the proposal should be subject to the Exception Test.

1.4.2.4 The proposal meets the requirements of the Exception Test because: -

- The development provides wider sustainability benefits to the community that outweigh flood risk concerns; the site proposals provide a net reduction in the discharge of surface water run-off than would be the case if the existing use continued without improvement;
- The site is already in use for the proposed purpose and would continue in that use if the proposals were not to go ahead;
- The assessment of the likely risk of flooding concludes that the development would be safe without increasing flood risk elsewhere and will incorporate facilities, where appropriate, to reduce or eliminate the risk of flooding overall.

2.0 POTENTIAL FLOOD HAZARDS

2.1 Definition of Potential Flood Mechanisms

2.1.1 The mechanisms by which flooding could occur at the site are: -

- Flooding from rivers and the sea;
- Overland flow comprising surface run-off from adjacent land;
- Groundwater (i.e. groundwater levels rising to the surface);

- Off-site drainage systems (i.e. the failure of off-site drainage infrastructure causing flow onto the site);
- On-site drainage systems (i.e. the failure or inundation of on-site drainage infrastructure causing flooding of the site);
- Reservoirs, canals and other artificial sources.

2.2 Means by which Flooding Would Occur

2.2.1 Flooding from River (Fluvial) and the Sea (Tidal)

2.2.1.1 The Environment Agency's flood map indicates that there is a medium probability of fluvial flooding to the site. This level of probability is based upon the extent of the 2007 flood event, which the mapping shows to have affected the site. However, witnesses who were present at the site during the 2007 flood event have reported that the flood waters did not reach the site. The premise that site was not affected by the 2007 flood event is further supported by a review of the Ordnance Survey contour mapping in the vicinity of the site, which indicates that the plateau on which the site would have been elevated above the flood level of flooding that is indicated on the Environment Agency map.

2.2.1.2 A challenge to the to the existing flood mapping has been lodged with the Environment Agency. A copy of the details submitted to the Environment Agency in support of this challenge is contained in Appendix D of this report. The outcome of this challenge is yet to be determined.

2.2.1.3 On the basis of the evidence submitted to the Environment Agency it would appear that the likelihood of river flooding to the site would be lower that the current Flood Zone designation would suggest.

2.2.1.4 There are no tidal waters in the vicinity of the site. Therefore it can be assumed that there would be no material risk of the site flooding from the sea.

2.2.2 Overland Flow from Adjacent Land

2.2.2.1 The site is located on a plateau, elevated above the surrounding land to the north, west and the south. Therefore, there is no risk of overland flow entering the site from these boundaries.

2.2.2.2 Smithies Council Depot is located beyond the eastern boundary of the site. The land occupied by the depot typically has shallow gradients and lies at a similar elevation to the proposed development. Internal drainage systems intercept the surface run-off within the Council depot. Only in the event of the failure of the drainage systems in the Council depot would there be any likelihood of flow entering the site.

2.2.3 Groundwater

2.2.3.1 The elevated situation of the site means that the risk of groundwater rising and causing flooding to the site is very low.

2.2.4 Off-Site Drainage Systems

2.2.4.1 Public sewers are located in Smithies Lane. Additionally, the access road between Smithies Lane and the site is drained by road gullies that appear to discharge via short connections to the existing reservoir to the south of the site.

2.2.4.2 The elevation of the site relative to the off-site drainage infrastructure suggests that there is very little risk of failures to the existing off-site infrastructure causing flooding at the site. However, blockage of the existing road gullies in the access road could result in localised flooding in the access road, which might affect the access to the site.

2.2.5 On-Site Drainage Systems

2.2.5.1 There is a risk of flooding to the site if the proposed drainage systems become blocked or inundated by excessive flow.

2.2.5.2 In order to minimise this risk the drainage systems will be designed to accommodate the anticipated flows and appropriate maintenance procedures put in place to guard against failure.

2.2.6 Reservoirs, Canals and Other Sources

2.2.6.1 There is a reservoir located at a lower elevation beneath the site to the south. The banks of the reservoir are approximately 4 metres below the level of the site.

2.2.6.2 The reservoir is elevated above the river Dearne, which flows along an alignment to the southwest of the site. Any overflow from the reservoir will flow towards the lower ground in the river valley. In certain circumstances overflow may also spill in to Smithies Lane to the south and, in extreme conditions, the lower levels of the access may be affected. The vertical alignment of the access road falls towards Smithies Lane. Therefore, the depth of any floodwater in the access road is unlikely to be excessive because it will flow into Smithies Lane. The junction of the access road and Smithies Lane is located at an elevation of approximately 47 metres OAD. This is a similar elevation to the road at Smithies Bridge, where the road crosses over the river. When flood waters reach this elevation they will tend to flow over the bridge to the lower sections of the river valley to the south, which will prevent the flood levels in the road increasing to any significant extent.

2.2.6.3 A section of the disused Barnsley Canal follows a route along the opposite side of the River Dearne valley to the proposed development. The canal follows the 50 metre contour as it passes the site, approximately 200 metres to the southwest. Consequently, the canal shares a similar elevation to the development site. Any overspill from the canal will flow to the lower elevations of the river valley and would have no impact on the site.

2.3 Existing Surface Water Drainage Arrangements

2.3.1 Storm water run-off is currently intercepted on the site by a system of underground drainage, which discharges via a single outfall to the River Dearne.

2.3.2 In order to accommodate the proposed refurbishment and extension of the current facilities, modifications to the existing network of drains is proposed. The revised drainage system will continue to use the existing connection to the river outfall. However, the introduction of sustainable drainage systems to better manage the run-off from the extension to the existing facilities will provide a net reduction in the amount of run-off that will be discharged to the existing outfall.

2.3.3 Foul drainage from the site is currently connected to the public sewer system via a connection laid in the access road. The existing network of foul drainage on the site will be extended to accommodate the proposed development. The system will continue to discharge via the existing connection to the existing public sewerage system, which, we understand, has sufficient capacity to accommodate the additional flows.

3.0 PROBABILITY OF FLOODING

3.1 Flood Zones

3.1.1 The Environment Agency assigns flood zones based on the likely probability of flooding. The Flood Zones are: -

Zone 1	Low Probability: *This zone comprises land assessed as having a less than 1 in 1000 chance of river or sea flooding in any year (<0.1%)*
Zone 2	Medium Probability: *This zone comprises land assessed as having between 1 in 100 and 1 in 1000 chance of river flooding (1% - 0.1%) and between 1 in 200 and 1 in 1000 chance of sea flooding (0.5% - 0.1%) in any year.*
Zone 3a	High Probability: *This zone comprises land assessed as having a 1 in 100 or greater chance of river flooding (>1%) and a 1 in 200 or greater chance of flooding from the sea (>0.5%) in any year.*
Zone 3b	Functional Floodplain: *This zone comprises land where water has to flow or be stored in times of flood.*

3.1.2 The Environment Agency have designated the site within Flood Zone 2.

3.1.3 This designation is based on the Environment Agency's modelling of the extent of the 2007 flood event. However, there are inconsistencies in the current modelling, which do not appear to correctly take into consideration the profile of the land that the site occupies. In addition, evidence obtained from personnel who were present at the site during the 2007 flood event suggests that no flooding was experienced within the confines of the site.

3.1.4 It is understood that the Environment Agency are currently undertaking a more detailed study of this section of the River Dearne catchment, which will more accurately model the likely flood levels of a range of flood events. The results of this study are anticipated to be available by the end of April 2010. If, as we consider to be the case, the study confirms that the likelihood of flooding to the site is low (i.e. less than 1 in 1000 chance of river flooding in any one year) the site would be re-designated as falling within Flood Zone 1.

3.1.5 Copies of correspondence received from the Environment Agency, together with details of their current flood mapping centred on the proposals is contained in Appendix C.

3.2 Strategic Flood Risk Assessment

3.2.1 The Local Authority has commissioned a Level 1 Strategic Flood Risk Assessment for the area but it is not yet complete. The draft planning document, the "Barnsely Core Strategy Preferred Options", makes reference to the Strategic Flood Risk Assessment and states that early indications are that the majority of the proposed Local Development Framework allocations (of which this site is one) are located in Flood Zone 1.

3.3 Probability of Flooding at the Site

3.3.1 Fluvial

3.3.1.1 Current Environment Agency mapping indicates that there is a medium risk of flooding to the site. This is based on their mapping of the 2007 flood event.

However, no flood levels are available in the vicinity of the site and the evidence of witnesses who were present at the site during the 2007 flood event, which says that the site did not flood, suggests the mapping is incorrect. This is further supported by a review of the land profile, which is described by the Ordnance Survey contours on the current flood map, a copy of which is contained in Appendix C to this report. The flood map shows the floodwaters apparently climbing beyond the 50 metre contour only at the site, while up-stream and down-stream it shows the extent of flooding only reaching lower elevations than that of the plateau on which the site is located. The extent of the flooding up-stream and down-stream of the site is consistent with that described by witnesses to the 2007 flood event.

3.3.1.2 Flooding to the site would most likely occur due to excessive flows in the river being constrained by the Smithies Bridge (where the Smithies Lane crosses over the river) and causing river levels to back up behind the bridge. The build up of water behind the bridge would lead to rising river levels. However, the rate at which the levels rise would be significantly curtailed once the bridge deck and parapet were overtopped. The road surface of the bridge is located at an elevation of 47 metres AOD, which is some 3 metres below the elevation of the site. Considering the moderate gradient of the river up-stream of the bridge (approximately 1 in 750) and that there is

nothing above the level of the bridge to constrict the flow, it is unlikely that the volume of flow in the river would be would be enough to rise levels in excess of the 3 metres that would be necessary to inundate the site. Moreover, the low point on Smithies Lane is located some 80 metres to the northeast of the bridge, which for practical purposes would reduce the elevation of the "weir" effect to a level below that of the bridge, making it even less likely that river levels would rise to the elevation of the development.

3.3.1.3 Since the site is elevated above the likely level of flooding from the river and protected by an earth bund along it's western and southern boundaries there would seem to be little probability of the site being flooded from the river. Furthermore, it is proposed to increase the height of the existing landscape screen along the edge of the site, which will offer further protection against flooding from the river.

3.3.2 Overland Flow

3.3.2.1 The probability of flooding to the site from overland flow is very low, as described in 2.2.2.

3.3.2.2 Only in the circumstances of a failure of the existing drainage infrastructure in the neighbouring Council depot would there be a risk of run-off from elsewhere entering the site. Even then it is likely that the run-off would flow onto the landscaped buffer zone along the edge of the development that borders the depot

and would filter into the permeable ground. Should the flow be in excess of that which would permeate into the ground, the levels of the site would guide the flow towards the site access road from where it would flow away from the development without causing flooding on the site.

3.3.3 Groundwater

3.3.3.1 The probability of groundwater flooding to the site is extremely low due to the elevated situation of the site.

3.3.4 Off-Site Drainage Systems

3.3.4.1 There is no material probability of off-site drainage systems causing flooding at the site.

3.3.4.2 Flooding to the access road may occur if the existing system of road gullies become blocked or damaged. The probability of such flooding could be managed and reduced through the implementation of an appropriate regime of regular cleaning and maintenance of the existing gullies and connections.

3.3.5 On-Site Drainage

3.3.5.1 Failure of the on-site drainage systems, either by blockage or inundation, would result in flooding to the site.

3.3.5.2 The layout and levels of the proposed site are designed such that in the case of failure of the drainage infrastructure, floodwaters would flow towards the access road in the southeast corner of the site and flow to lower levels away from the

development. In addition, the proposed levels ensure that the depth of any flooding is minimised. The maximum depth of flooding would be less than 50mm, which would not be sufficient to prevent access or movement around the site. Nor would it be deep enough to breach the threshold of any building or accommodation.

3.3.5.3 The proposed areas of permeable paving would also assist in reducing the affect of any such flooding.

3.3.5.4 The probability of such flood events occurring will be reduced by designing drainage systems that operate efficiently and with sufficient capacity to accommodate the necessary flows including an anticipated increase in the rate of rainfall due to the possible effects of climate change.

3.3.6 Reservoirs, Canals and Other Artificial Sources

3.3.6.1 There is no material probability for flooding from the nearby reservoir or canal, as described in 2.2.6. Therefore, it is not necessary to militate against such events.

3.4 Existing & Proposed Run-Off from the Site

3.4.1 Plans A and B in Appendix B show, respectively, the existing and proposed layout of the site, including the relative areas of permeable and impermeable surface. A summary of the relative areas of permeable and impermeable surface areas is set out in table 3.4.A (below)

Table 3.4.A

Summary of Site Area	Impermeable Surface (Ha)	Permeable Surface (Ha)	Total Area (Ha)
Existing Layout			1.538
Hard paving (roofs, roads etc)	0.718		
Grassland		0.820	
Proposed Layout			
Hard paving (roofs, roads etc)	0.718		
Permeable paving		0.243	
Grassland		0.577	

3.4.2 Table 3.4.A shows that the total area of the site and the relative proportions of permeable and impermeable surface are unchanged by the proposals.

3.4.3 Based upon the comparison of the existing and proposed surface areas it might be assumed that the effect of the proposals on the existing surface run-off from the site is negligible. However, the potential infiltration capacity of the proposed permeable paving (which is in excess of that of the existing grassland areas) is such that the proposals realise a net reduction in the run-off that would be discharged from the site.

3.4.4 Appendix B to this report contains an assessment of the existing and proposed run-off from the site, using the Wallingford Rational Method. The calculations, using a range of rainfall intensities, demonstrate that reduction in the amount of run-off discharged from the site will be in

the order of 13%. However, this reduction is based on the assumption that only rainfall that falls directly onto the permeable paving would be drained by that means. In reality, run-off from other areas of the site will also flow onto the areas of permeable paving and also be drained in that way. Consequently, a greater reduction in the amount of run-off can be anticipated.

4.0 CLIMATE CHANGE

4.1 The Likely Effects of Climate Change on the Proposed Development

4.1.1 During the anticipated lifetime of the proposed development there may be changes to current climate patterns that have an impact upon the risk of flooding. The potential changes to the existing climate pattern that might affect the site are an increase in the intensity of rainfall and an increase in the peak flow in rivers.

4.1.2 The potential increase in the peak rainfall intensity during the lifetime of the development could be in the order of 15%. As a precautionary measure, the capacity of the drainage systems for the site, including any attenuation measures, should be designed to accommodate this potential increase in rainfall in order to avoid the risk of flooding.

4.1.3 The potential increase in the peak flow of rivers during the lifetime of the development could be in the order of 20%. B11 of Annex B of PPS25 suggests that an increase may not have a significant effect on the level of floodwaters in

well-defined floodplains. The floodplain adjacent to the site can be considered "well defined" in that the steep valley sides beneath the site and on the opposite side of the river contain the flood flow. Therefore it can be assumed that the relative increase in levels will not be sufficient to breach the embankment, which currently protects the site. The proposals to raise the level of the landscaping screen along the boundary of the site would offer further protection against possible increases in flood levels.

5.0 DETAILED DEVELOPMENT PROPSALS

5.1 Description of the Proposed Development

5.1.1 The proposed development comprises a refurbishment and extension of the existing travellers site facilities. The planning application includes drawings that show the layout and details of the proposed improvements to the site.

5.1.2 The existing access arrangements and utility connections to the site are unaffected by the proposals.

5.2 Layout of the Proposed Development (in relation to flood risk)

5.2.1 In the context of flood risk, the proposals provide benefits over the existing layout through the improved management of surface run-off and introduction of sustainable measures, the result of which is to reduce the risk of the site flooding and also reduce the net storm water discharge from the site.

5.2.2 The design of the surface levels and falls on the site ensures that, in the event of flooding, the depth of floodwater would be minimal. In addition, the proposed levels provide for any floodwater to flow away from the development via the existing access road, to be intercepted, if necessary, by the drainage infrastructure in the road.

6.0 FLOOD RISK MANAGEMENT MEASURES

6.1 Protection of the Site from Flooding

6.1.1 The site is currently protected from flooding from the river by an earth bund along the southern and western boundaries of the site.

6.1.2 A proposed landscape screen along the southern boundary of the site will increase the level of the existing bund by approximately 1.5 metres, which will provide increased protection against flooding from the river.

6.1.3 Other measures incorporated into the design of the development, which assist to protect against flooding, are discussed in 5.2.

7.0 OFF SITE IMPACTS

7.1 Potential Effects of the Development of Flooding Elsewhere

7.1.1 Because of the isolated and elevated situation of the site, its existing use and the measures incorporated into the design, the proposal is unlikely to have any impact on drainage mechanisms or flooding elsewhere.

7.1.2 Only in the unlikely situation where the on-site drainage system is inundated would run-off flow unmanaged from the site and in that event it would be intercepted by the existing drainage system in the access road, which, it is understood, discharges directly to the reservoir to the south of the site.

7.2 Proposed Measures to Prevent Run-Off from the Proposed Development Causing Impact Elsewhere

7.2.1 The layout of the site and the proposed drainage systems ensure that there is no uncontrolled discharge from the site that would cause impact elsewhere.

8.0 RESIDUAL RISKS

8.1 Residual Risk of Flooding

8.1.1 In the event flooding to the site due to exceedance of the capacity of the proposed drainage system or breach of the flood defences, the proposed site levels ensure that floodwaters flow towards the access road and away from the proposed development, as described in 3.3.5.2. Similarly, the proposed levels will ensure that the depth of any flood will be minimised such that flood waters would not pose a threat to property or access.

8.2 Measures to Mitigate and Manage Residual Flood Risk

8.2.1 During the lifetime of the development, the Local Authority, or their agents, will continue to manage the facility and will maintain an administrative presence on the site, as at present. Managing the facility in this way means that they are able to establish and implement

appropriate emergency procedures including, when necessary emergency evacuation of the site.

8.2.2 In the event that evacuation procedures are necessary when Smithies Lane is inaccessible due to flood, a suitable emergency escape route to higher ground can be established through the adjacent land occupied by Smithies Council Depot or the Household Waste Recycling facility, both of which are controlled by the Council.

C) CONCLUSION

a. The proposed development does non constitute a change in the existing use of the site and the existing use would continue in the event that the proposed development does not go ahead.

b. The proposed development use is not compatible with the current Flood Zone designation of the site. However, the use is compliant with current planning policy and would meet the requirements of the Sequential Test and Exception Test as described in PPS25 Annex D.

c. The proposed development would have the benefit of improving the existing drainage at the site and reducing the storm water run-off from the site.

d. The proposals do not increase the risk or severity of flooding to the site or the impact of any flooding.

e. The proposals have no adverse impact on the drainage mechanisms or flooding off-site.

f. There are no reasons of adverse impact on flooding or water management to suggest that the development should not go ahead.