

Response to NRW Comments

197424-F01 Rev B | 1st October 2024

Unit 1, MPN House, The Ponds, Ynyscorrwg Road, Glyncorrwg, Port Talbot, SA13 3EA

1 Authorisation

Ashfield Flood Risk Solutions Ltd (“Ashfield”) was commissioned by Bingham Hall Ltd on behalf of Andrew Scott Construction Ltd (“the client”) to undertake a Flood Risk Briefing Note for Unit 1, MPN House, The Ponds, Ynyscorrwg Road, Glyncorrwg, Port Talbot, SA13 3EA (“the site”). This report has been prepared in response to the comments provided by Natural Resources Wales (NRW), dated 30th August 2024, concerning the proposed construction of four industrial workshop units and associated works. No site survey was undertaken as part of this commission.

2 Aim & Objectives

The aim of this Briefing Note is to demonstrate that the proposed development complies with the requirements of TAN15. This will be achieved through the following objectives:

- Demonstrate that proposed building will be flood free at the 1 in 100 year + Climate Change (CC) flood event;
- Demonstrate that the proposed development will not increase flood risk elsewhere; and,
- Illustrate that there will be safe evacuation procedures in place informed by a Flood Warning and Evacuation Plan.

3 FCA Summary

A Flood Consequences Assessment (FCA) (ref: 6807-BHP-02-XX-RP-C-(50)215, Bingham Hall, June 2024) was submitted in support of the planning application for the construction of a new single storey industrial unit which is divided into four individual units. The building will be complete with a total of 18 car parking spaces and vehicular access points to each unit's roller shutter door openings.

The FCA indicates that the site lies within Flood Zone C2 (an area of the floodplain without significant flood defence infrastructure) within the Development Advice Map. The site is classified as being ‘previously developed land’ and in line with Planning Policy Wales guidance, the development aims to make the best use of an existing land whilst not exacerbating flood risks elsewhere. The proposed development is industrial, defined within TAN15 as a ‘Less Vulnerable’ development, and utilises a brownfield site.

The FCA concluded that the site is located within an area at risk of fluvial flooding from the Afon Corrwg. Flood risk from all other sources were concluded to be Low or Negligible.

4 Response to NRW Comments

NRW issued comments on 30th August 2024, outlining their concerns regarding flood risk associated with the proposed development. The comments are attached as Appendix A for reference. The following responses have been provided to directly address NRW's comments.

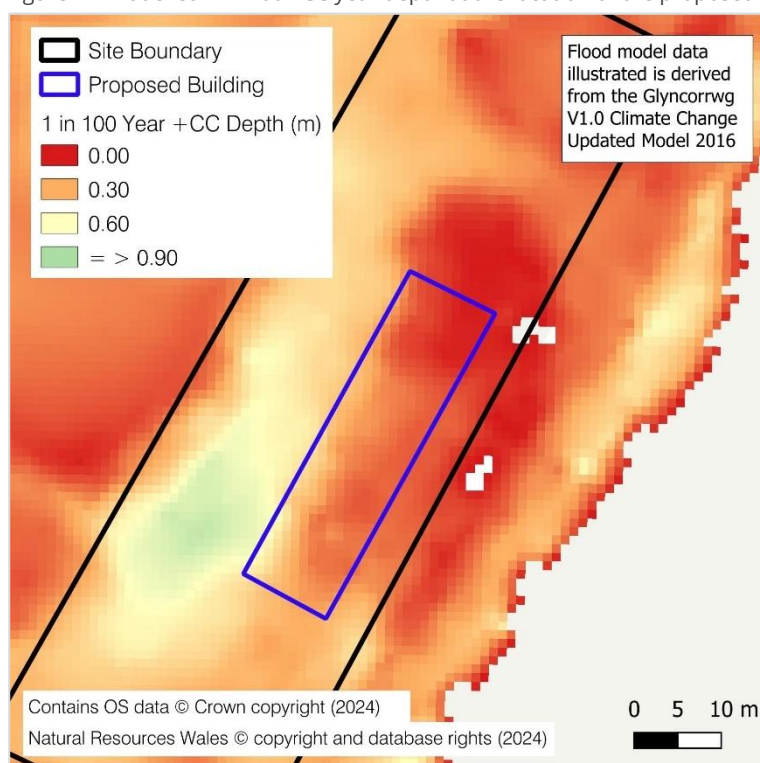
Comment:

'The FCA has failed to demonstrate compliance with A1.14 of TAN15 in that the site is at fluvial flood risk in the 1%+CC fluvial flood. Whilst the site is also impacted in the 0.1% fluvial flood, the flood depths are within the tolerances of A1.15.'

Response:

Figure 1 illustrates the modelled flood depths at the location of the proposed building at the 1 in 100 +CC year event. As shown in Figure 1, flood depths are shown to be less than 300mm within the majority of the location of the proposed building.

Figure 1 – Modelled 1 in 100 +CC year depth at the location of the proposed building



The Finished Floor Level (FFL) of the proposed building should be raised to a level of 209.92mAOD. This is the maximum modelled flood level at the location of the proposed building at the 1 in 100 +CC year event. This will ensure the building remains flood free during this event. Flood resilience measures would also be integrated into the building's design up to a level of 210.39mAOD, which is the maximum modelled flood level at the location of the proposed building at the 1 in 1000 year event plus a 0.3m freeboard. This provides a greater level of freeboard above the 1 in 100 year +CC event for additional protection.

The following measures were recommended within the FCA submitted by Bingham Hall Ltd:

- Closed cell insulation should be used for pipes which are below the predicted flood level;
- Non-return valves are recommended in the drainage system to prevent back-flow of diluted sewage in situations where there is an identified risk of the foul sewer surcharging. Maintenance of these valves is important to ensure their continued effectiveness;
- Electrical sockets should be installed above flood level for ground floors to minimise damage to electrical services and allow speedy re-occupation;
- Boiler units and ancillary devices should be installed above predicted flood level. Underfloor heating should be avoided. Controls such as thermostats should be placed above flood level. Conventional heating systems, e.g. hot water pipes are unlikely to be significantly affected by flood water unless it contains a high salt content;
- Wiring for telephone, TV, internet, and other services should be protected by suitable insulation in the distribution ducts to prevent damage. Any proposed design solution for flood insulation on all potentially vulnerable wiring should be discussed with the relevant service providers;
- Careful consideration should be given to effectively sealing any associated joints; and,
- Additionally, the avoidance of any flooring which would be susceptible to flood prone damage would be ensured, and only flood resilient materials used.

A Flood Warning and Evacuation Plan (FWEP) will be in place post development to ensure the safe evacuation of all on-site staff should the site flood in future. A copy of this FWEP is attached as Appendix B for reference. The report accompanying the Glyncorrwg flood model data states that within the model, there are 5 inflow points at the top end of each river, as ESTRY 1D QT inflow points. Each QT inflow point uses a Flow-Time hydrograph with an 8.5 hour duration. The 8.5 hour duration will provide sufficient time for the actions within the FWEP to be carried out.

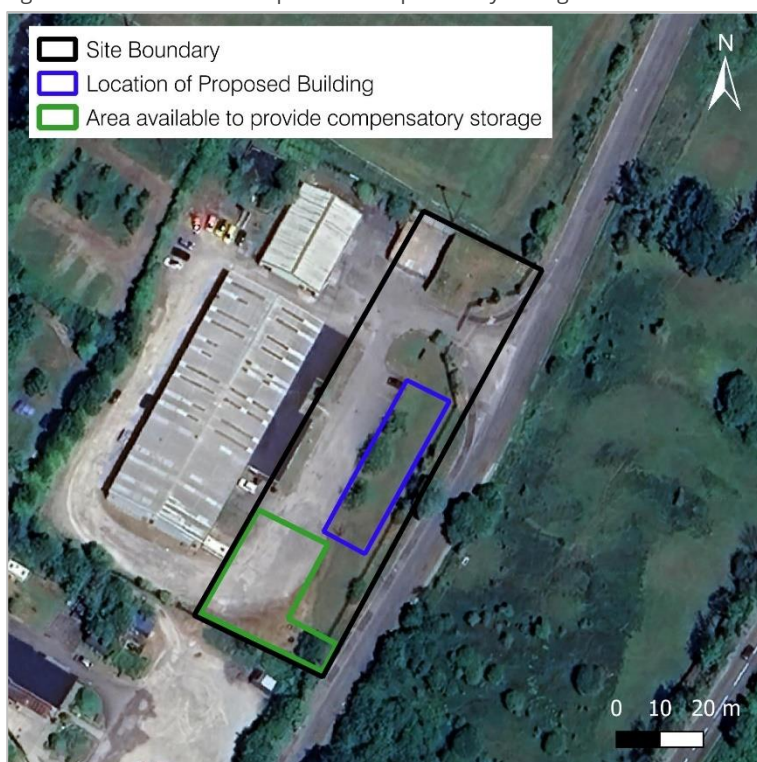
Comment:

'Given the fluvial flood risk to the site any new built development has the potential to cause an increased flood risk elsewhere, the FCA has failed to demonstrate compliance with Table A1.12 of TAN15 in relation to this matter.'

Response:

Based upon the proposal to set the internal finished floor level (ground floor) at 209.92mAOD, this would potentially cause a minor increase in displacement of flood water should such a flood event occur. Fortunately, an area directly to the south-west of the proposed development footprint and to the south of the proposed attenuation basin is available to provide compensatory flood storage should such an event occur. Figure 2 below demonstrates the location and extent of this area.

Figure 2 – Area available to provide compensatory storage



Based upon the close proximity of this area to the proposed development, and the large footprint that is available to be utilised within the wider site boundary, a cut and fill exercise would be undertaken to ensure a like for like volume of compensatory storage is made available at the 1 in 100 year +CC flood event. This exercise would be completed prior to commencing construction of the development and can be conditioned.

Comment:

'Section 4.1 utilises predicted flood depths to the site that has been derived from NRW's hydraulic model for the Afon Corrwg. Whilst this information doesn't provide anything to support the proposed in terms of TAN15 compliance, it should be noted that given the age of the model information (2016) it is likely the hydrology is no longer fit for purpose and revised hydrology may show an increased risk to site.'

Response:

The elevation of the FFLs of the proposed building above the 1 in 100 +CC year event and the incorporation of flood resilience measures up to a level of 210.39mAOD will ensure that any potential increased flood risk within a new model is accounted for. It is believed that this conservative design approach demonstrates mindfulness of the potential for events of greater magnitude and depths.

Furthermore, given the general small size and scope of this development, undertaking a new model run of the Afon Corrwg hydraulic model purely for this application is potentially onerous, and managing this potential additional residual risk has been approached by factoring in further safeguards within the design, such as flood resilience design and a flood plan in place.

5 Conclusion

This report has addressed the comments made by NRW on 30th August 2024 and demonstrates that the proposed development complies with the requirements of TAN15. The FFL of the proposed building should be raised to the maximum modelled flood level at the location of the proposed building at the 1 in 100 +CC year event (209.92mAOD) to ensure the building remains flood free during this event. Flood resilience measures should be integrated into the building's design up to a level of 210.39mAOD (the 1 in 1000 year flood level at the location of the proposed building plus a 0.3m freeboard). This provides a greater level of freeboard above the 1 in 100 year +CC event for additional protection.

Compensatory flood storage will be provided by utilising the external area directly to the south of the proposed building. Finally, a Flood Warning and Evacuation Plan will be in place post development to ensure the safe evacuation of all on-site staff should the site flood in future.

Flood Risk Briefing Note



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Appendices

Appendix A

NRW Comments

Ein cyf/Our ref: CAS-261471-D1T1
Eich cyf/Your ref: P2024/0434

Neath Port Talbot County Borough Council
The Quays
Briton Ferry
SA11 2GG

Dyddiad/Date: 30 August 2024

Annwyl Syr/Madam/Dear Sir/Madam,

BWRIAD/PROPOSAL: PROPOSED CONSTRUCTION OF 4 NO. INDUSTRIAL WORKSHOP UNITS (USE CLASS B2), HIGHWAYS ARRANGEMENTS, PARKING, DRAINAGE, LANDSCAPING AND ALL ASSOCIATED WORKS

LLEOLIAD/LOCATION: GLYNCORRWG WORKSHOPS, C250 TO GLYNCORRWG LINK ROAD, GLYNCORRWG, SA13 3EA

Thank you for consulting Cyfoeth Naturiol Cymru (CNC)/Natural Resources Wales (NRW) about the above, which we received on 29 July 2024.

We have concerns with the application as submitted because inadequate information has been provided in support of the proposal. To overcome these concerns, you should seek further information from the applicant regarding flood risk. If this information is not provided, we would object to this planning application. Further details are provided below.

We also advise that based on the information submitted to date, conditions regarding land contamination and pollution prevention should be attached to any planning permission granted. Without the inclusion of these conditions, we would object to this planning application.

Flood Risk

The planning application proposes less vulnerable development, namely four industrial workshop units. Our Flood Risk Map confirms the site to be wholly within Zone C2 of the Development Advice Map (DAM) contained in Technical Advice Note (TAN) 15: Development and Flood Risk (2004). The Flood Map for Planning identifies the application site to be at risk of flooding and falls into Flood Zone 2 and 3 Rivers.

Section 6 of TAN15 requires the Local Planning Authority to determine whether the development at this location is justified. Therefore, we refer you to the tests set out in section 6.2 of TAN15. If you consider the proposal meets the tests set out in criteria (i) to

(iii), then the final test (iv) is for the applicant to demonstrate through the submission of a Flood Consequences Assessment (FCA) that the potential consequences of flooding can be managed to an acceptable level.

Having reviewed the Flood Consequences Assessment (FCA) submitted by Bingham Hall Partnership Ltd (Doc Ref. 6807-BHP-02-XX-RP-C-(50)215 Rev P01) we do not agree that the proposed development complies with the requirements of TAN15.

The FCA has failed to demonstrate compliance with A1.14 of TAN15 in that the site is at fluvial flood risk in the 1%+cc fluvial flood. Whilst the site is also impacted in the 0.1% fluvial flood, the flood depths are within the tolerances of A1.15.

Given the fluvial flood risk to the site any new built development has the potential to cause an increased flood risk elsewhere, the FCA has failed to demonstrate compliance with Table A1.12 of TAN15 in relation to this matter.

Section 4.1 utilises predicted flood depths to the site that has been derived from NRW's hydraulic model for the Afon Corrwg. Whilst this information doesn't provide anything to support the proposed in terms of TAN15 compliance, it should be noted that given the age of the model information (2016) it is likely the hydrology is no longer fit for purpose and revised hydrology may show an increased risk to site.

In summary, unless a suitably revised FCA can technically demonstrate compliance with TAN15 then we would support your authority's refusal of the proposed on the grounds of flood risk and third party detriment.

Land Contamination

1. Glyncorrwg Industrial Units – Desk Study and Field Reconnaissance. SOCOTEC UK Limited, Report No H3091-23/G1, April 2024.
2. Glyncorrwg Industrial Units – Ground Investigation Report (Factual Account and Interpretative Assessment). SOCOTEC UK Limited, Report No H3091-23/G2, July 2024.
3. Drainage Strategy Report – Proposed Light Industrial Units at Glyncorrwg, for Neath Port Talbot County Borough Council. Bingham Hall Partnership Limited, Project Reference: 6807, June 2024.

We have reviewed the supporting documentation listed above, and we agree with the conclusion that the risk to controlled water is low. We therefore request the following condition and informative is imposed on any planning permission granted.

Condition 1 – Unsuspected Contamination

If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the Local Planning Authority) shall be carried out until a remediation strategy detailing how this unsuspected contamination shall be dealt with has been submitted to and approved in writing by the Local Planning Authority. The remediation strategy shall be carried out as approved.

Reason:

To ensure the risks associated with previously unsuspected contamination at the site are dealt with through a remediation strategy, to minimise the risk to both future users of the land and neighbouring land, and to ensure that the development can be carried out safely without unacceptable risks.

Drainage

We note that foul water will be disposed of off-site via the local mains sewer network. Discussions should be had with Dŵr Cymru regarding the nature of the trade discharge/sewage being discharged from the site due to the industrial nature of the proposed units, as additional permissions may be required.

For surface water drainage we note the proposed use of detention basin and swales to collect, convey and treat surface water runoff prior to discharge to the local surface water sewer (not a combined sewer).

Given the industrial nature of the site, all drainage features should be clearly and permanently labelled to prevent accidental disposal of pollutants during the lifetime of the site.

Pollution Prevention

The application site is 7.5 metres away from a minor watercourse and located approximately 90 metres from the main River Corrwg. Construction and demolition activities can give rise to pollution and so it is important that appropriate provisions are in place to manage dust, silt, surface water and the storage of waste, particularly during the construction phase. A construction environmental management plan should include site-specific measures which will be put in place before construction to prevent pollution to the surrounding land and water environments.

Condition 2 – Pollution Prevention

No development, including site clearance, shall commence until a site wide Construction Environmental Management Plan (CEMP) has been submitted to and approved in writing by the Local Planning Authority. The CEMP shall include:

- Details of site construction drainage, containments areas, appropriately sized buffer zones between storage areas (of spoil, oils, fuels, concrete mixing and washing areas) and any watercourse or surface drain. All fuel, oil and chemicals used on Site must be stored away in a locked store which is bunded to 110% capacity of the total volume stored.
- Details of how surface water runoff from the site during construction will be managed/discharged
- Pollution Prevention: demonstrate how relevant Guidelines for Pollution Prevention and best practice will be implemented, including details of emergency spill procedures and incident response plan, following the Pollution Control Hierarchy. Site specific pollution sensitive receptors (e.g. surrounding watercourses) should be identified and their risks (including potential pollution pathways from the construction site to those watercourses), and the methods of mitigation should be identified.

- Demonstrate how each of those watercourses and pathways will be protected from site run off during construction. Preventing sediment from entering the stream/ditch should be first priority (e.g. Leaving a significant buffer zone of unstriped land and surrounding with silt fencing appropriately installed as per manufactures guidance).
- A monitoring plan for watercourses, including how the water quality of the watercourses will be monitored and recorded.
- Details of the persons and bodies responsible for activities associated with the CEMP and emergency contact details.

The CEMP shall be implemented as approved during the site preparation and construction phases of the development.

Justification:

A CEMP should be submitted to ensure necessary management measures are agreed prior to commencement of development or phase of development and implemented for the protection of the environment during construction.

Advice to applicant

Pollution prevention

Prior to commencing any excavation, pollution protection methods should be installed to ensure there is no adverse impact from the works. A variety of silt mitigation measures should be implemented throughout the work site where appropriate, as they work more effectively in combination. Metal pins/rods should not be used to support silt fencing or sedi-mats as they do not provide sufficient support, resulting in the products sagging or collapsing. Wooden stakes should be used in accordance with the manufacturer's installation recommendations.

Water quality leaving the working area will need to be regularly monitored to avoid a pollution incident. It may be necessary to: adjust, replace, or augment the pollution control products deployed and/or adapt the work method further, as work recommences and progresses. As with all pollution mitigation measures, these will need to be reviewed by yourselves regularly through the works and if found not to be sufficient, other options should be considered.

Wherever possible, clean or uncontaminated water should be intercepted and diverted around the working area. This should help minimise the volume of dirty water generated and therefore requiring treatment (if reasonably practicable). The agreed method of working must be complied with at all times to avoid discolouration/sedimentation or pollution of the watercourse. Should any discolouration/sedimentation or pollution of the watercourse occur, work must stop immediately, and Natural Resources Wales should be notified on 0300 065 3000 to review work practices before work re-commences.

Contamination

The treatment and disposal of contaminated soils and groundwater is regulated by waste legislation and requires an environmental permit.

Excavated materials that are recovered via a treatment operation can be re-used on-site under the [CL:AIRE Definition of Waste: Development Industry Code of Practice](#). This

voluntary Code of Practice provides a framework for determining whether or not excavated material arising from site during remediation and/or land development works are waste.

Developers should ensure that all contaminated materials are adequately characterised both chemically and physically, and that the permitting status of any proposed on site operations are clear. If in doubt, Natural Resources Wales should be contacted for advice at an early stage to avoid any delays.

Other Matters

Our comments above only relate specifically to matters included on our checklist, *Development Planning Advisory Service: Consultation Topics* (September 2018), which is published on our [website](#). We have not considered potential effects on other matters and do not rule out the potential for the proposed development to affect other interests.

We advise the applicant that, in addition to planning permission, it is their responsibility to ensure they secure all other permits/consents/licences relevant to their development. Please refer to our [website](#) for further details.

If you have any queries on the above, please do not hesitate to contact us.

Yn gywir / Yours faithfully

A Fracchiolla

Cynghorydd - Cynllunio Datblygu/Advisor - Development Planning
Cyfoeth Naturiol Cymru/Natural Resources Wales

E-bost/E-mail: swplanning@cyfoethnaturiolcymru.gov.uk

Croesewir gohebiaeth yn Gymraeg a byddwn yn ymateb yn Gymraeg, heb i hynny arwain at oedi./Correspondence in Welsh is welcomed, and we will respond in Welsh without it leading to a delay.

Appendix B

Draft Flood Warning and Evacuation Plan

Flood Warning and Evacuation Plan

1 October 2024

Andrew Scott Construction Ltd

Unit 1, MPN House, The Ponds, Ynyscorrwg Road,
Glyncorrwg, Port Talbot, SA13 3EA



Document Control

Client	Andrew Scott Construction Ltd
Report Title	Flood Warning and Evacuation Plan
Report Reference	197424-F01
Report Status	Final
Prepared by	H. Perkins
Checked by	H. Fisher
Approved by	A. Jones
Date of Issue	01/10/2024
Issue Method	PDF

Legal

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Distribution

Bingham Hall Ltd

David Hopkins

Andrew Scott Construction Ltd





1 Introduction

1.1 Authorisation and Context

Ashfield Flood Risk Solutions Limited ("Ashfield") was commissioned by Bingham Hall Ltd on behalf of Andrew Scott Construction Ltd ("the Client") to undertake a Flood Warning & Evacuation Plan ("FWEP") in support of a planning application for the construction of four no. industrial workshop units and all associated works at Unit 1, MPN House, The Ponds, Ynyscorrwg Road, Glyncorrwg, Port Talbot, SA13 3EA ("the site").

1.2 Purpose of the Plan

The overall aim of this FWEP is to provide a site-specific action plan to ensure that all staff are in a fully informed position regarding the risk of flooding and know what actions to take, should a flood event be predicted to occur. This FWEP also seeks to ensure staff safety in relation to access/egress around the site and that staff will be able to safely evacuate the site in a timely manner, if required, prior to the onset of any projected local flooding.

This FWEP will ensure that flood warning procedures and subscription details to the Natural Resources Wales (NRW) flood warning systems are made available for the users of the site.

1.3 Limitations

This document has been devised specifically for the purposes of flood response, in context of the proposed development being in use. Any reference to the assessment of flood risk is taken directly from the FCA prepared by Bingham Hall Ltd (Ref: 6807-BHP-02-XX-RP-C-(50)215, Bingham Hall Ltd, June 2024) as part of the site's formal planning application.

1.4 Site Location

The site is located at coordinated XY: 287359, 198557 (nearest post code: SA13 3EA) and occupies an area of approximately 0.3 hectares (ha). The site is located approximately 2.7km north-east of the village of Cymmer. The site currently comprises undeveloped ancillary yard space/car parking area. The site is accessed via Ynyscorrwg Road to the east, which extends from Cymmer Road to the south.

The site is bound by a playing field to the north, Ynyscorrwg Road to the east and existing industrial units and associated ancillary yard space to the west and south.



2 Flood Risk Summary

Table 1 provides a summary of the classification of risk to the site from all potential flood sources. Further detailed information in relation to each risk source can be seen within the aforementioned FCA submitted by Bingham Hall Ltd.

Table 1 – Flood Risk Summary

Flood Source	Description of Classified Risk
Fluvial	The proposed building has been designed to have an internal ground floor level which is above the 1 in 100 year +CC flood event from the Afon Corrwg.
Tidal	The site lies approximately 16km from the coastline; therefore, as anticipated, NRW's flood risk map for flooding from the sea, indicates no risk of flooding.
Surface Water	This depression fronting the existing building is the cause of the surface water flood risk indicated on the NRW flood risk map. The area shown to be at risk is currently served by two road gullies which, as part of this development, will be removed and replaced with permeable surfacing and new drainage channels. The more widespread drainage mechanism will offer a betterment to the existing localised drainage spots.
Groundwater	The site investigation works indicate two perched water tables may be present within the Made Ground (at around 1m and 4m depth) and a lower water table within the Brithdir Member at around 6.5m. Therefore, during periods of heavy rainfall, there is potential for the ground to become saturated and the water table to rise to ground level. In this instance overland flows may occur; however, depths will be minimal due to the widespread nature of the flooding, affecting much of the area local to the Afon Corrwg.
Artificial Sources	Given the local sewers are under the ownership of Neath Port Talbot County Borough Council, they are considered to be easily manageable with risks of blockages being minimal. Chambers are well positioned across the site facilitating regular inspections and maintenance when required.

The main source of flooding at the site is considered to be fluvial. Section 2 therefore focuses on this source, for the lifetime of the proposed development.



3 NRW Flood Warning

3.1 Likelihood of Flooding

From a review of the FCA submitted by Bingham Hall Ltd, the main risk of flooding to the site is fluvial sources. The site is indicated to be at risk at the 1 in 100 year event +CC event.

A Flood Warning & Evacuation Plan is required to ensure all staff are aware of the risk and are able to safely evacuate and/or seek refuge, prior to the onset of a flood.

3.2 Flood Information Service

The NRW website provides up to date flood warning information based on address/postcode locations, using the link: <https://naturalresources.wales/flooding/check-flood-warnings/?lang=en>.

Furthermore, Floodline can be called to receive up-to-date flooding information through the following number: 0345 988 1188. The postcode for the site is: SA13 3EA.

Signing up for the NRW Flood Warning Service is required to be undertaken by the site manager or main representative. The service is free, and information is provided through telephone, mobile, email, SMS text message or fax. The information provided through these channels would be based on continually updated information that would also be available on the aforementioned NRW website. Registration for this service can be carried out over the phone (0345 988 1188) or by using the following link: <https://naturalresources.wales/flooding/sign-up-to-receive-flood-warnings/?lang=en>

Once registered, warnings will be issued up to two days in advance. All staff should be aware of this FWEP, its contents and location.

3.3 NRW Flood Warning Codes

Flood warnings are issued at differing levels of magnitude, defined as “flood warning codes” based on the latest NRW guidance¹. These codes relate to the level of risk that the site is potentially at, and each one is outlined below.

Disclaimer

Where possible, Ashfield has provided site specific advice that provides an increased level of understanding of what actions may need to be taken for the differing levels of flood warning severity on site. The responsibility of engaging with the correct information providers and carrying out specific actions that relate to the severity of warning lies with the site manager. Information on flood warnings can be sought using the direct links provided within this FWEP.

¹ <https://naturalresources.wales/flooding/managing-flood-risk/how-we-forecast-floods-issue-warnings-and-assess-flood-risk/?lang=en>



3.4 Five Day Forecast

“Be aware. Think ahead. Keep an eye on the weather situation”.

Forecasts are updated daily on the Flood Information Service and more frequently for situations of increased flood risk. NRW work with the Joint Flood Forecasting Centre, based at the Met Office in Exeter to provide a five-day assessment of flood risk from all sources on a county scale.

National mapping within this interface will show one of four levels of risk for each county:

1. Green = **No risk** of flooding.
2. Yellow = **Low risk** of flooding.
3. Amber = **Medium risk** of flooding.
4. Red = **High risk** of flooding.

3.5 Flood Alert

“Flooding is possible. Be prepared”.



A *Flood Alert* shall be issued between two hours and two days in advance depending on the confidence of the prediction methods. This may be triggered by unusually high predicted tide or surge levels; and/or, weather forecast predicting intense rainfall within the vicinity of the site of further upstream.

Site Specific Action

This magnitude of warning should trigger an increased level of awareness on site. Staff are recommended to:

- Be made aware that this warning is in place and be kept informed.
- Be mindful of potential areas of localised water accumulation to areas on-site that are used by staff and by the public and report these instances immediately;
- Periodic checking of the NRW website, Floodline and Flood Information Service should be carried out every two hours to establish whether the Flood Alert has been de-escalated, or escalated to a higher level (Flood Warning or Severe Flood Warning); and,
- Keep informed of any updates.

3.6 Flood Warning

“Flooding is expected. Immediate action required”.



Flood Warnings are issued half an hour to one day in advance of potential flooding occurring, depending on the accuracy of the prediction methods. This may be triggered by high tides combined with strong winds; and/or forecasted heavy rainfall within close proximity or upstream of the site.



Site Specific Action

A *Flood Warning* would warrant an increased level of vigilance and include the following recommended actions:

- Ensure that any localised accumulation of water is identified and monitored outside of the site and wider area;
- Ensure that all access and egress routes are still fully passible, and not being encroached by flood water. Evacuation of the site at this point (See Section 4); and,
- Periodic checking of the Flood Information Service should be carried out every two hours to establish whether the *Flood Warning* has been de-escalated or escalated to a higher level (*Severe Flood Warning*).

3.7 Severe Flood Warning

“Severe flooding. Danger to life”.



A *Severe Flood Warning* poses a significant risk to life or significant disruption to local communities or infrastructure. Escalation to this level would be triggered by:

- Actual flooding being identified where it poses significant risk to life;
- Breach of flood defences or failure of a flood barrier; and/or,
- Specialised knowledge of the area that warrants its escalation.

Site Specific Action

When a Severe Flood Warning is in place, the following actions are recommended to be undertaken:

- Usually, this level of risk warrants that access to the site should be avoided. Evacuation will have already been taken from issue of a Flood Warning.
- Continual monitoring of the NRW website, Floodline and Flood Information Service, as well as local media to understand the potential length and magnitude of the risk;
- Communication directly with NRW; and,
- The site should not be accessed until confirmation can be sought that the *Severe Flood Warning* has been removed, and further clarification from the emergency services has been given that safe access to site has been restored.

3.8 Warning No Longer in Force

“No further flooding is currently expected for your area”.

When flood warnings are no longer in force, this means that the risk of flooding has subsided, and no further flooding is expected. This decision will have been triggered through the judgement of professionals and discussions with partners which are in agreement for this to occur.

Site Specific Action

Should flooding have occurred on site, it should be initially evaluated whether access has been fully re-established to site. This should be done in conjunction with NRW, Emergency Services, and any other parties.

The scope of this FWEPP does not cover any further actions that should be undertaken on site should severe damage have occurred. In this instance, the relevant person(s) should work alongside NRW and relevant authorities to establish whether it is safe to access the site.



4 Evacuation Plan

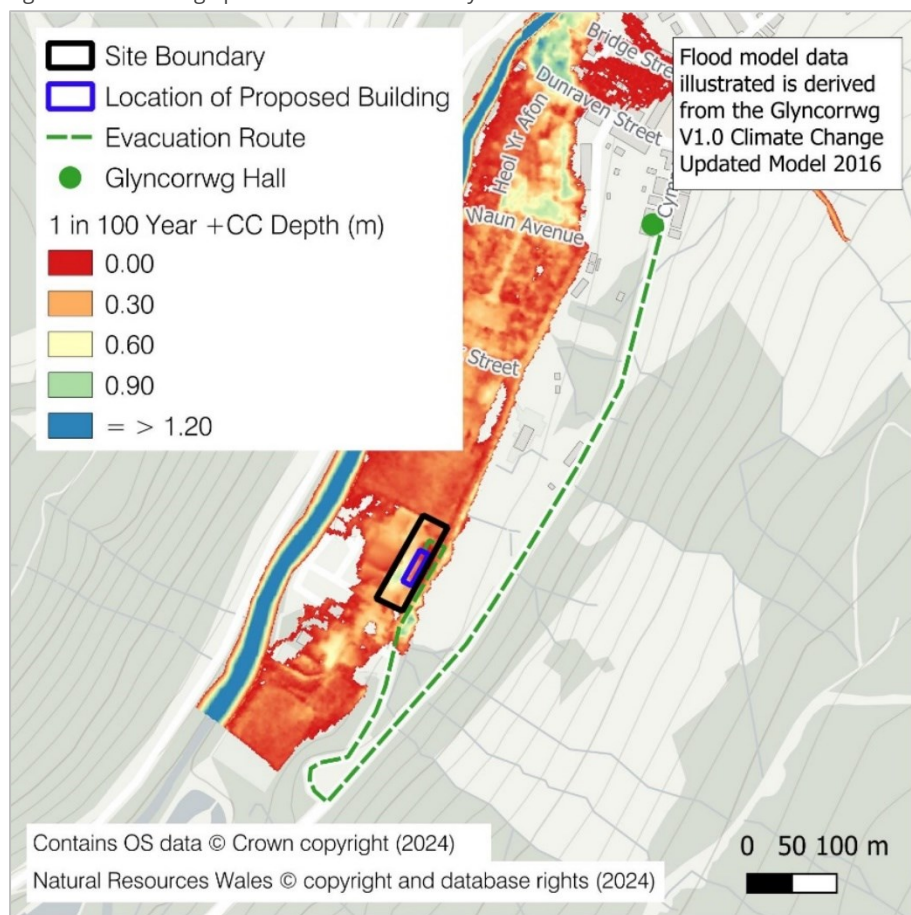
4.1 Introduction

An evacuation plan is required to ensure that a safe egress route has been provided to a safe refuge point should flooding be identified to occur at the site or along any important access routes.

4.2 Safe Refuge Point

A safe refuge area is to be established, and not located where potential flooding could occur. Based upon this, it is recommended that the site is evacuated prior to a flood event occurring. Figure 1 shows the site location in relation to nearest appropriate public point of safe refuge, which is not liable to flooding (Glyncorrwg Hall), set at an elevation of >229mAOD.

Figure 1 - Safe refuge point out of the 1 in 100 year +CC event



Safe Refuge Point Location Description & Address: Glyncorrwg Hall, 33-35 Cymmer Road, Glyncorrwg, Port Talbot SA13 3AB

XY Coordinates: 287599, 198934



Access: It is recommended that the refuge point is accessed by vehicle or by foot due to the distance of the building being approximately 1km away.

Should the safe point of refuge be changed in future, based upon further advice from the Local Authority or NRW, this will need to be fully communicated to all users of this FWEP.

4.3 Evacuation Procedure

Following the flood warning guidelines seen in Section 3, the Evacuation Procedure would be instigated when a Flood Warning is issued. In this instance, all staff should evacuate the site and proceed to the pre-determined egress route to the refuge point.

Evacuation should be considered by the site manager upon issue of a Flood Warning. Should it not be safe to evacuate, the emergency services should be contacted to inform them of your location.



5 Summary

This FWEP provides an overview of flood risk at the site, in-line with the findings of the original FCA (Ref: 6807-BHP-02-XX-RP-C-(50)215, Bingham Hall Ltd, June 2024). The measures included within this FWEP are considered to be appropriate based on the level of fluvial risk that exists at the site.

To ensure an enhanced awareness of flood risk in the local area, the site manager should register to NRW Flood Warning service as per Section 3 of this FWEP.



5.1 Limitations of this report

This report has been prepared by Ashfield Flood Risk Solutions Limited (Ashfield) for the sole benefit of the client.

This report has been prepared for the benefit of Andrew Scott Construction Ltd (the “Client”) and the eventual owners and occupiers of the site. If reliance on this report was required by a third party, this could be arranged for an agreed fee. This report should not be used by the client in relation to any other matters not covered specifically by the scope of the report. If this report does not contain a signature in the Document Control window, then this is an uncontrolled electronic copy and should not be relied upon by the client or any other recipient, as Ashfield cannot give assurances on the source or content of the document. Ashfield has used all reasonable skill, care and diligence in the preparation of this report.

This Flood Response Plan has been prepared for the client as outlined in Section 1. It only includes a site investigation where specifically referenced. Ashfield accepts no responsibility for the accuracy or completeness of third-party data reviewed within this assessment.

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