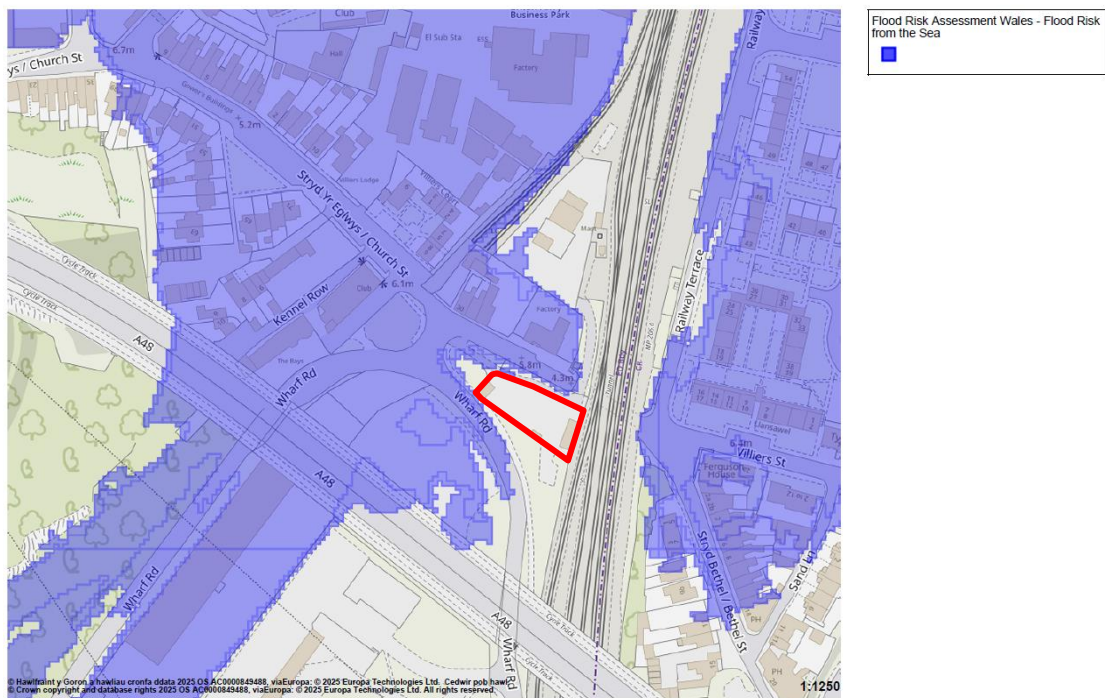


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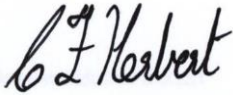
Ponderosa, Briton Ferry Flood Response Plan



May 2025
Final

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Signed 

Date May 2025

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1 INTRODUCTION

Ponderosa is a residential family compound located off Church Street, Briton Ferry. The compound consists of a day room, static caravan, touring caravan, parking area, garden shed and kennels. The Flood Risk Assessment Maps indicate that the site is currently not at risk of flooding (see Figure 1.1), even during a 1 in 1000 year event. However, when taking climate change into consideration the site potentially could be at risk considering the proximity of the site to the Tidal Afon Need.

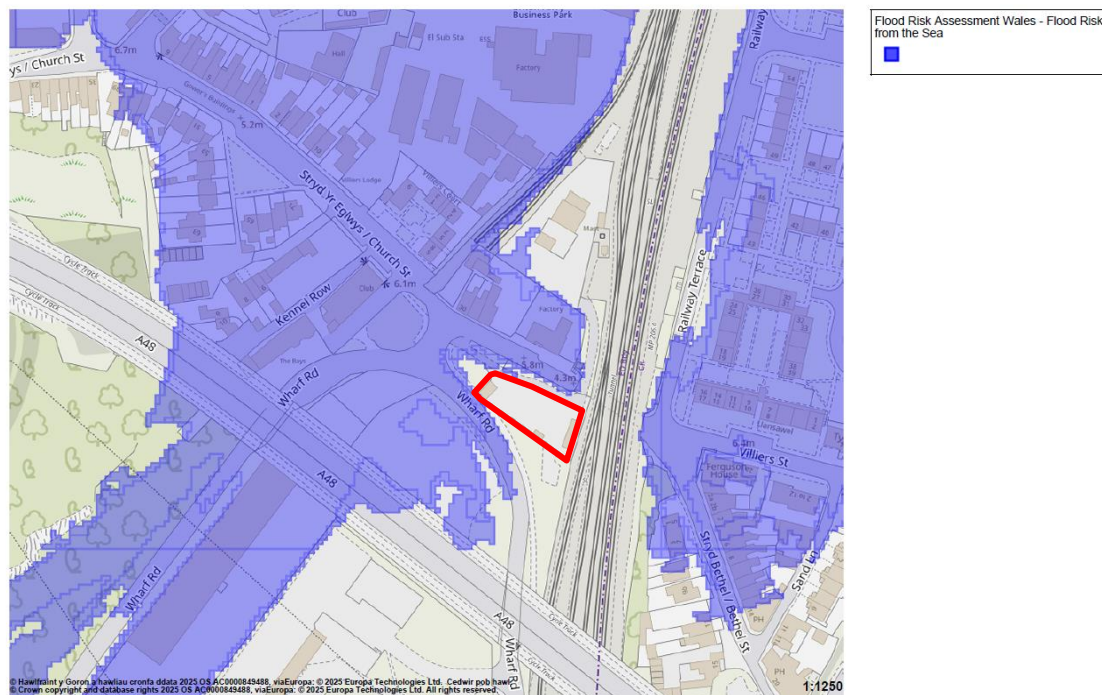


Figure 1.1 – Flood Risk Assessment Map

A Flood Consequence Assessment (FCA) has been prepared and submitted as part of a planning application. The report identified that part of the site potentially could be at risk from tidal flooding when sea level rise is taken into consideration. It was, therefore, recommended that a Flood Response Plan be prepared in the event that flooding occurred in the area.

This document details the flood response procedures and is based on the conclusions of the FCA and should be read in conjunction with it.

2 LOCATION

The proposed site (coordinates 273945, 194060) is situated off Church Street, towards the southern end of Britton Ferry (see Figure 2.1 to 2.3 and Plate 2.1). The main Paddington to Fishguard railway line lies immediately to the east and the A48 overpass is some 55m to the south. Afon Nedd is 550m to the west while the open sea, of Swansea Bay, is some 3km to the south west. The area is used for both commercial and residential purposes.

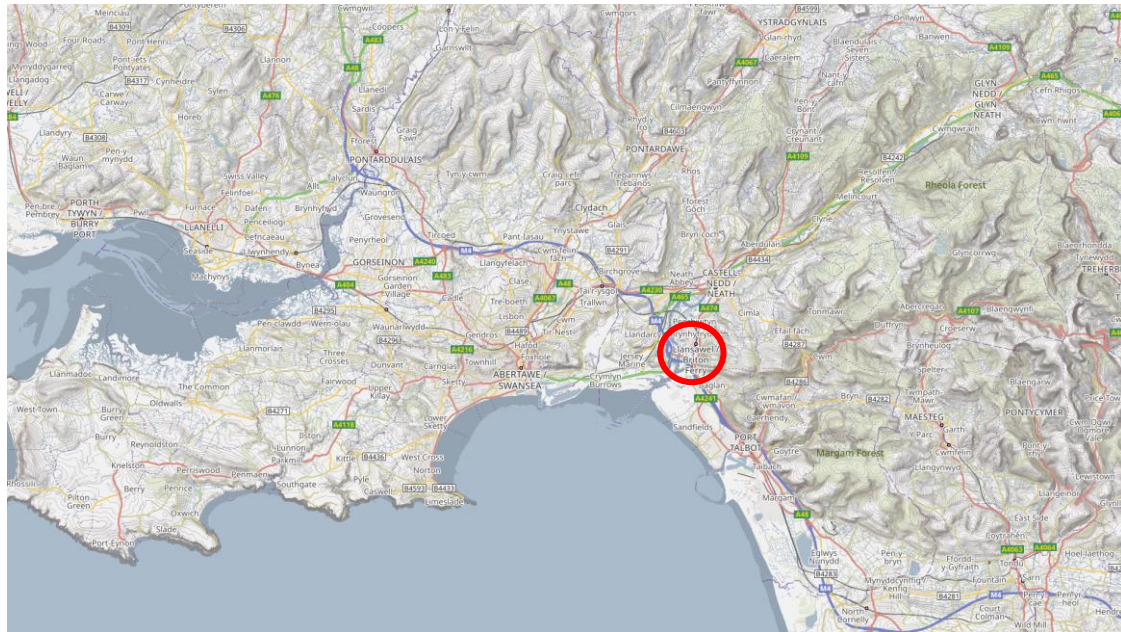


Figure 2.1 – Location Plan

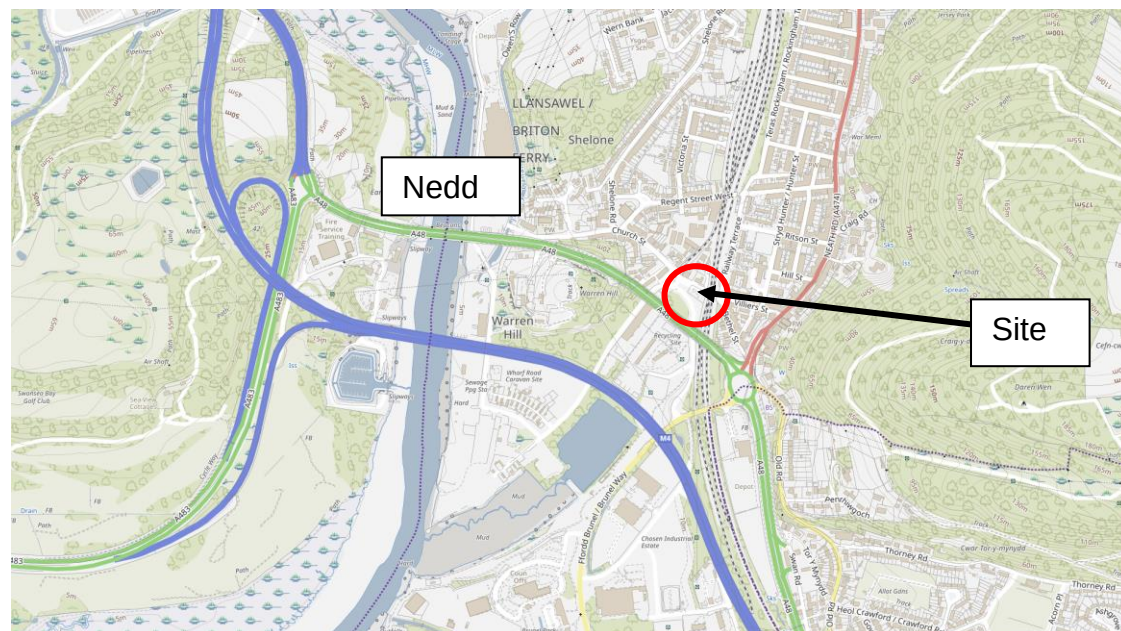


Figure 2.2 – Plan of Area

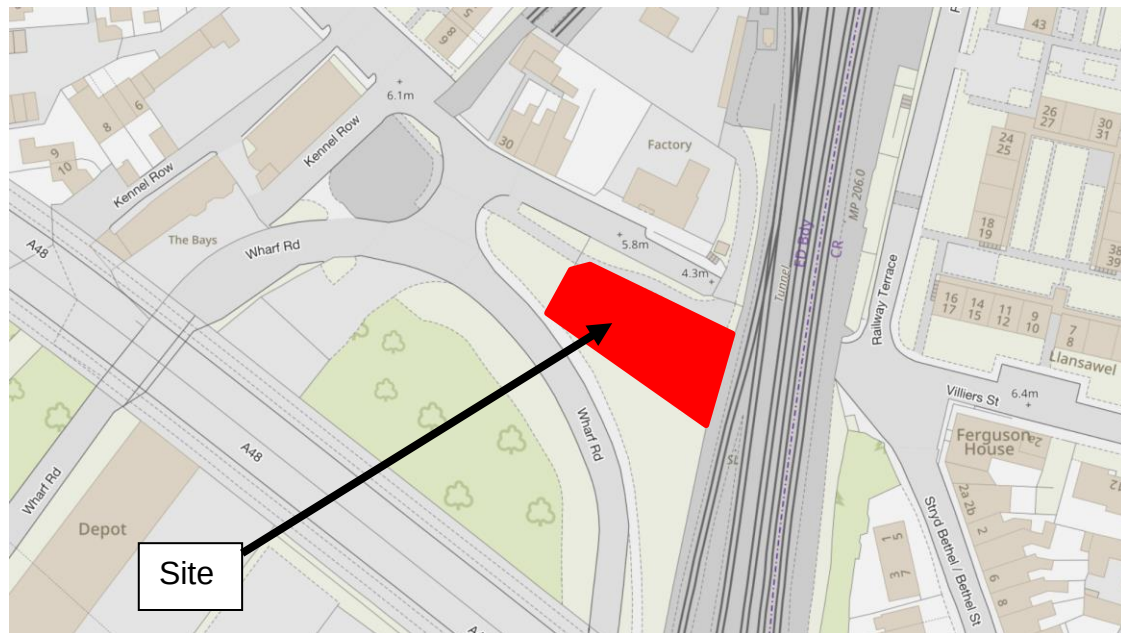


Figure 2.3 – Plan of Site

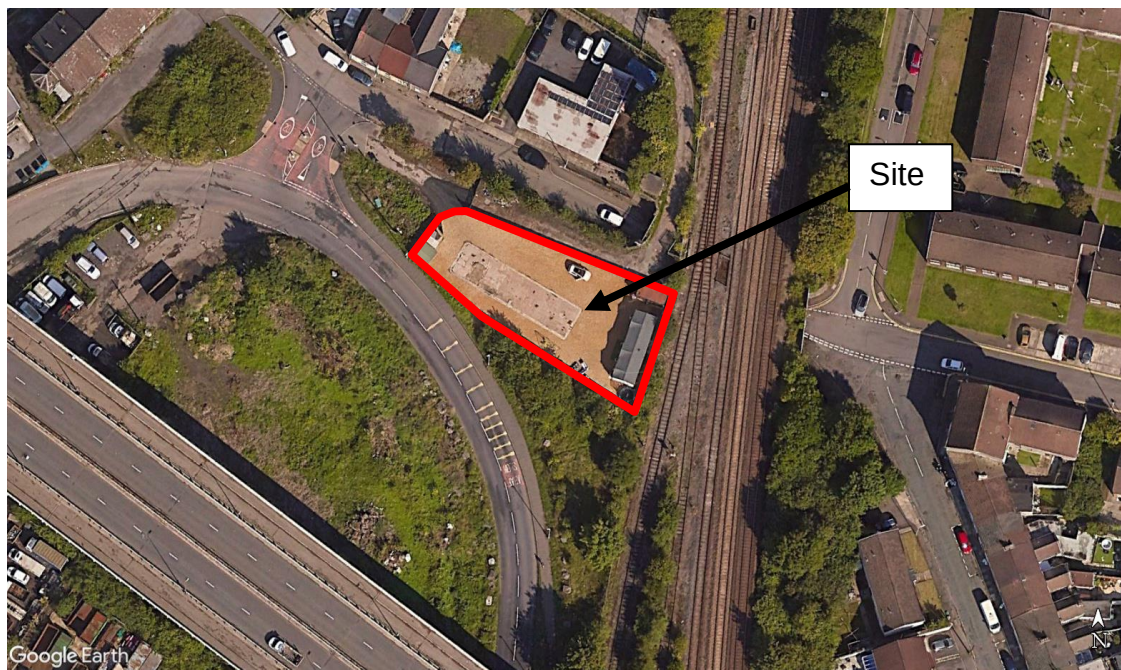


Plate 2.1 – Aerial View of Site

Development

The compound consists of a day room, static caravan, touring caravan, parking area, garden shed and kennels (see Figure 2.4 to 2.8).

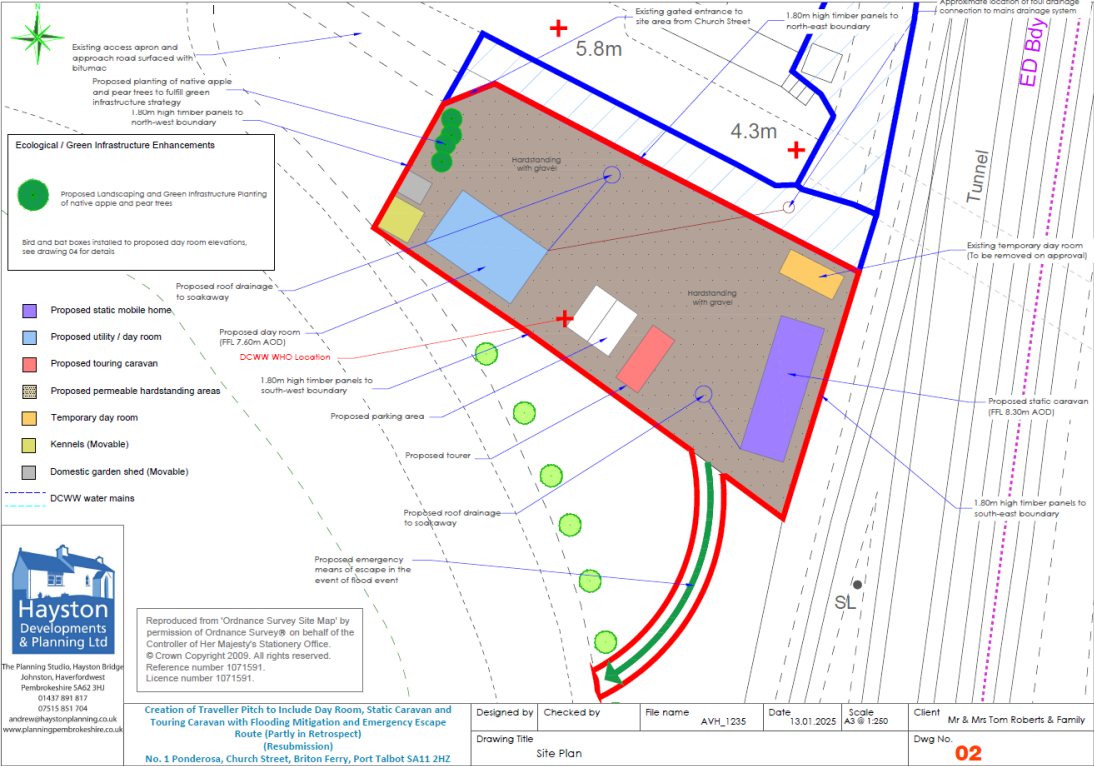


Figure 2.4 – Ponderosa Compound

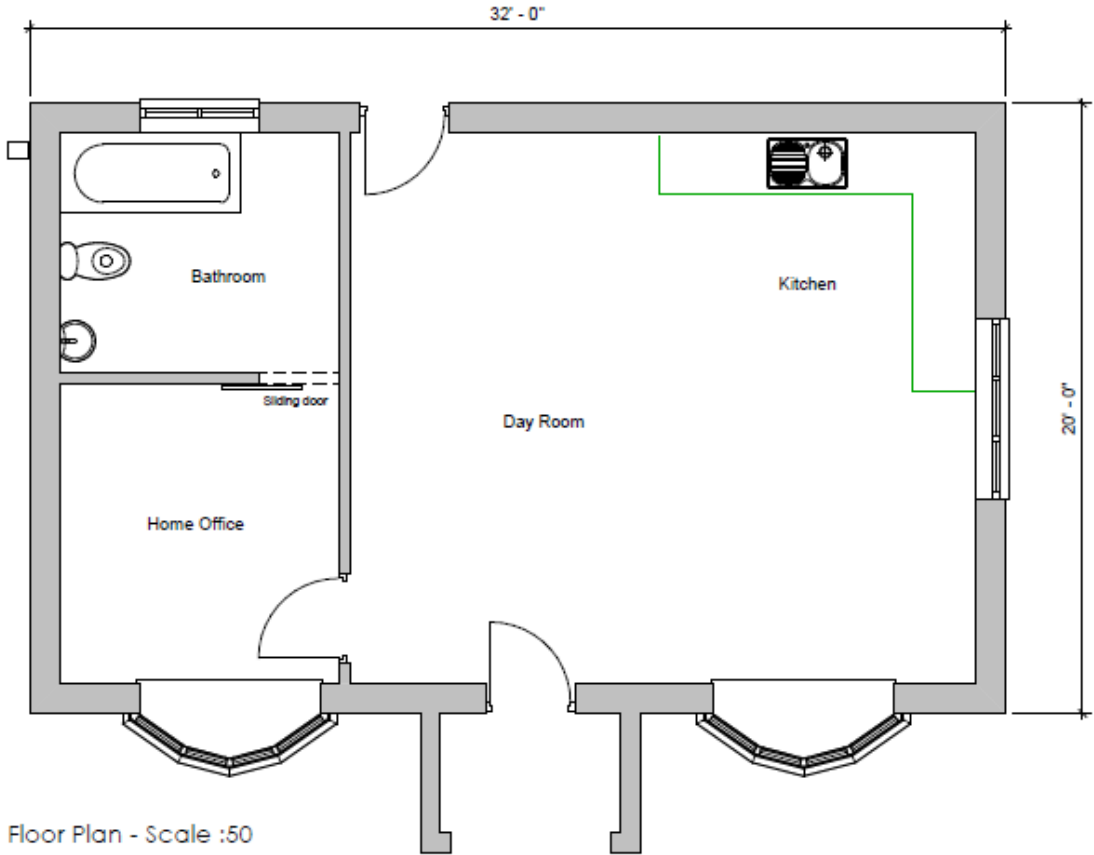


Figure 2.5 – Floor Plan of Proposed Day Room



Figure 2.6 – Front Elevation of Proposed Dayroom



Figure 2.7 – Rear Elevation of Proposed Dayroom

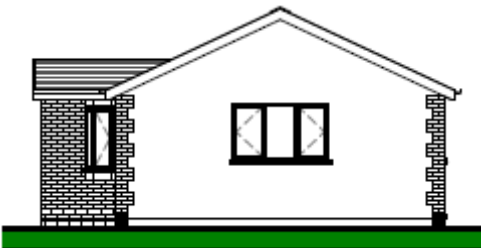


Figure 2.8 – Side Elevation of Proposed Dayroom

3 FLOOD RISK

The Flood Risk Assessment Map (Figure 3.1) shows that the site is not at risk of flooding even during a 1 in 1000 year event. The map, however, does not take climate change or sea level rise into consideration. The Flood Maps For Planning, which do take climate change into consideration, have also been considered. The maps show that the site is not at risk of flooding from a river, small watercourse or surface water (see Figure 3.2 and 3.3) in addition the site is also not at risk of flooding from reservoir failure (see Figure 3.4) or ground water. The maps, however, did show that part of the site potentially could be at risk from tidal flooding (see Figure 3.5) during both the 1 in 200 and 1 in 1000 events (T200 and T1000). It should be noted however that the maps assume 100 years of sea level rise.

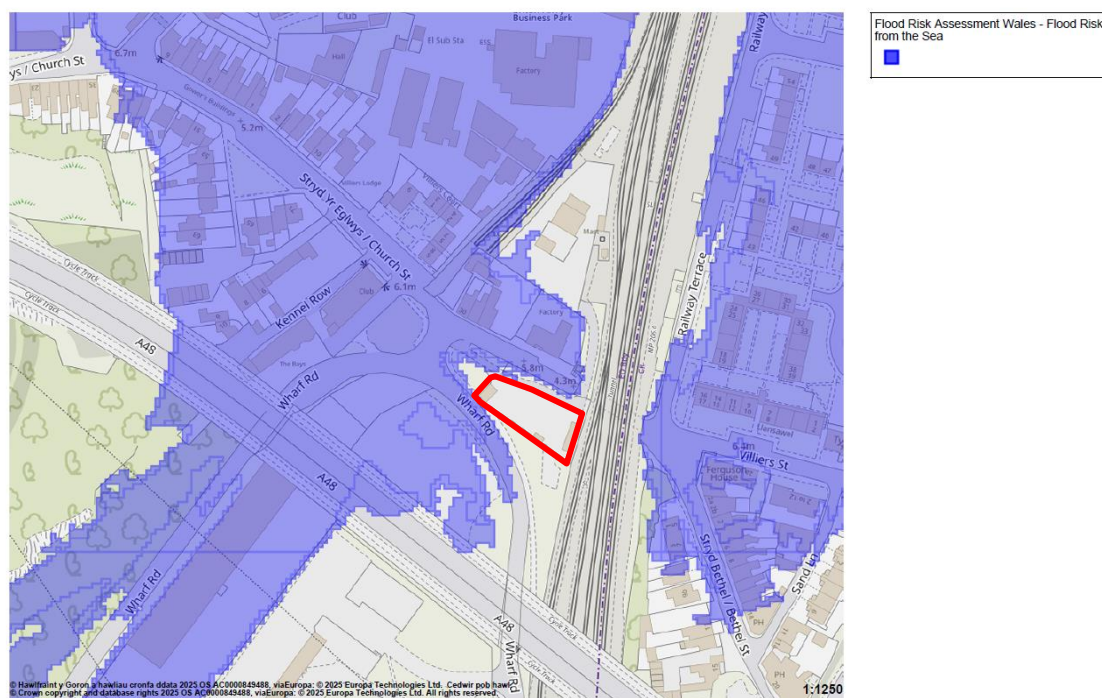


Figure 3.1- Flood Risk Assessment Map

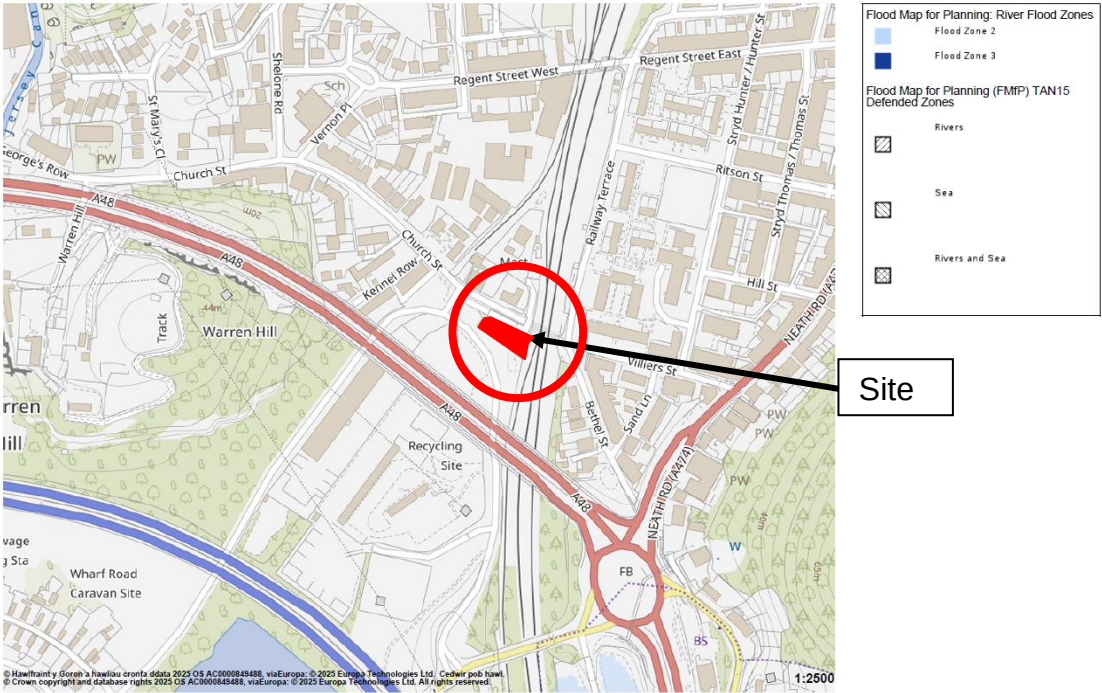


Figure 3.2 – River Flood Map For Planning

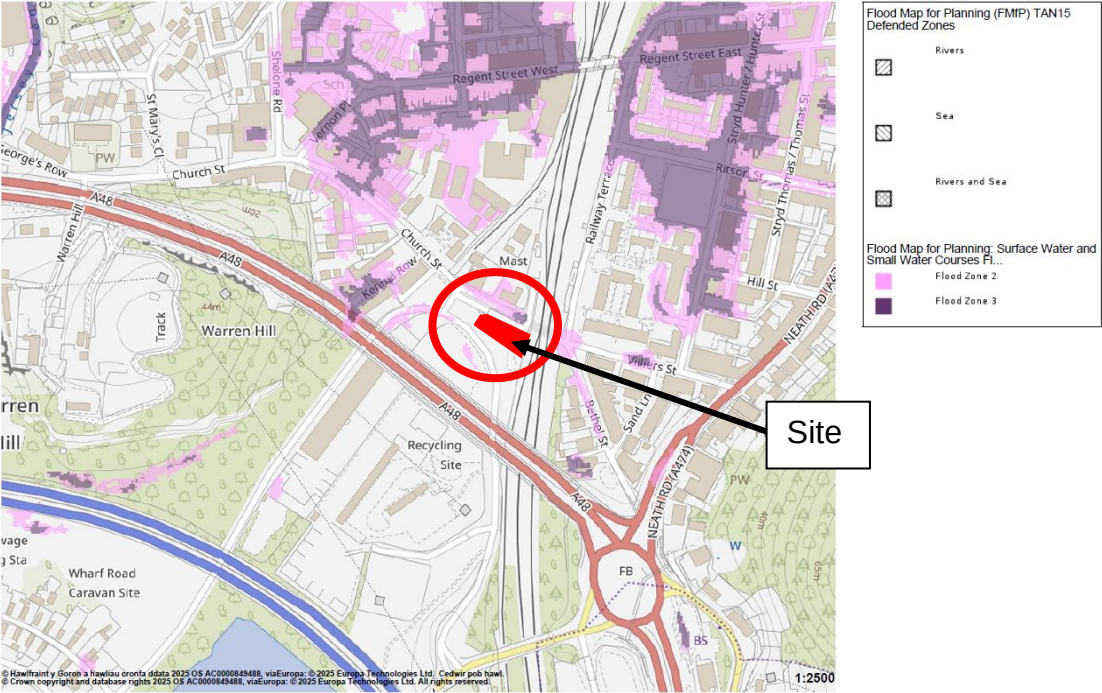


Figure 3.3 – Surface Water and Small Watercourses Flood Map For Planning

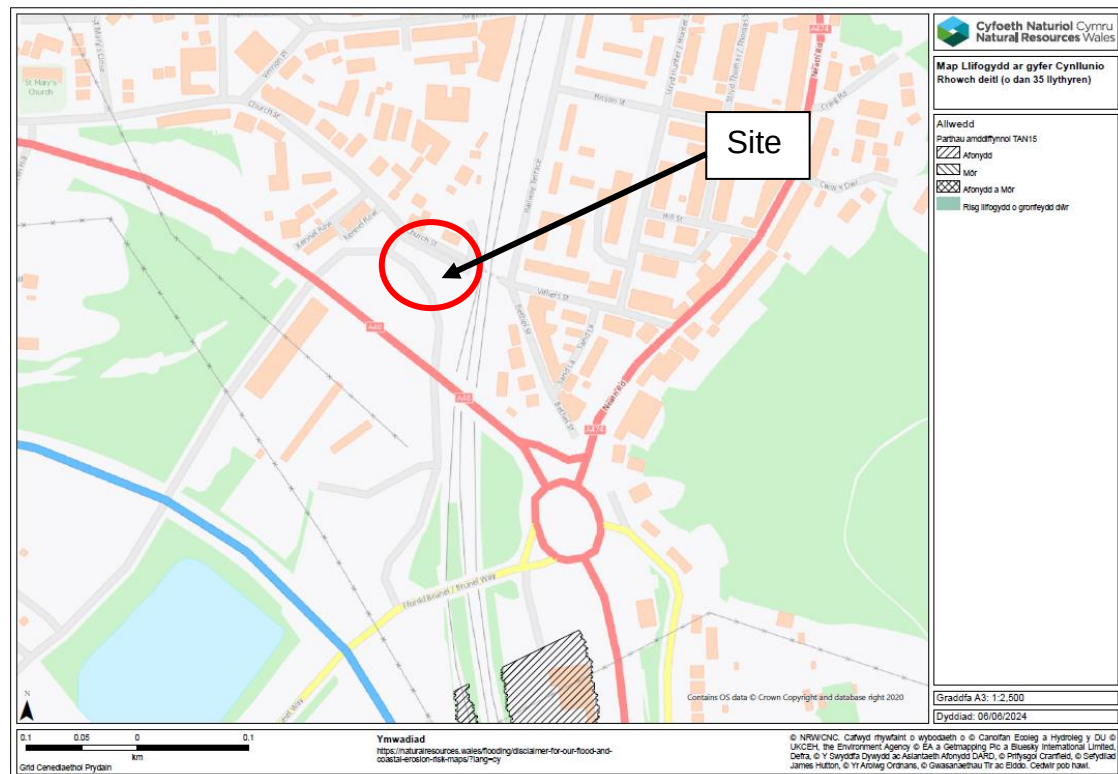


Figure 3.4 – Flood Risk From Reservoir Failure

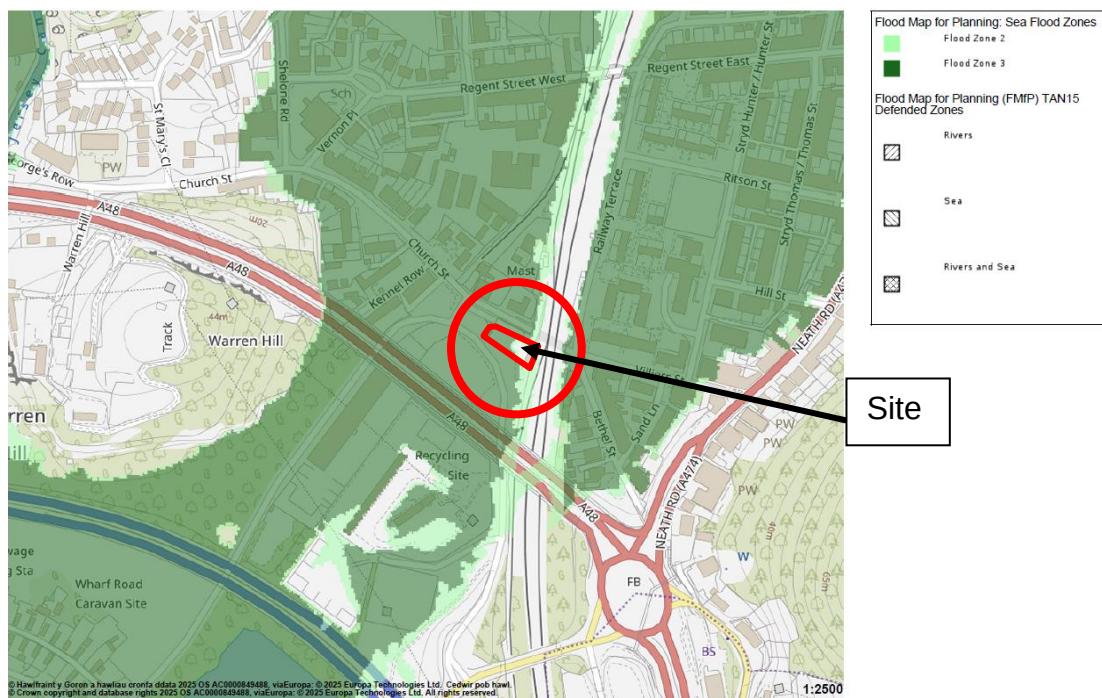


Figure 3.5 – Sea Flood Map For Planning

The method promoted in the coastal flood boundary conditions (for UK mainland) research project, as amended (2018), has been used to determine the T200 and T1000 high tide levels. This accounts for the joint probability of meteorological (surges etc) and astrological effects (the impact of the sun and the moon) on the tide. The levels for the adjacent coast were obtained for the T200 and T1000 events and have a

95% confidence level. The 97.5% value were also considered, precautionary, and are provided in Table 3.1 (base year 2017).

In addition, the current tide levels should be increased to account for sea level rise expected during the lifetime of the development. 100 years of sea level rise is usually considered for a new highly vulnerable development (such as a dwelling). The derived T200 year and T1000 year levels, using the above approach, are provided in Table 3.2.

Table 3.1 - Water Surface Extreme Tide Elevation (m AOD)			
T200 (0.5%)		T1000 (0.1%)	
Level	97.5% Confidence	Level	97.5% Confidence
6.43	6.62	6.69	7.08

Table 3.2 Tide Levels With Sea Level Rise					
	2017	Current	50 years of sea level rise	75 years of sea level rise	100 years of sea level rise
T200	6.43	6.458	6.932	7.264	7.627
T200 Precautionary	6.62	6.648	7.122	7.454	7.817
T1000	6.69	6.718	7.192	7.524	7.887
T1000 Precautionary	7.08	7.108	7.582	7.914	8.277

TAN 15 require the development to be flood free during the T200 event and manageable during the T1000 (eg flood depth less than 600mm). Potentially the development could be limited to a design life of 50 years allowing the site to remain flood free even during a 1 in 1000 year event. Alternatively the site levels could be raised above 7.627m AOD which would allow all of the development to remain flood free during a T200 while allowing the risk to be manageable during a T1000 event. Precautionary, the site level could be set at 7.817m AOD. The static caravan is expected to remain flood free even during the T1000 event providing a place of refuge if required.

As the source of flooding is tidal a reasonable flood warning period is likely (measured in days) allowing the site to be evacuated if necessary. An evacuation route, with a manageable flood risk, to Brunel Way is also available should it become necessary to evacuate the site at the height of an event (see Section 4).

In building the day room the following wet proofing measures will also be considered where practical.

- Valuable items will be moved to the first floor during an event.
- The ground floor will be of a solid construction.
- Where appropriate water resistant render will be used for the walls.
- Ceramic tiles will be used for wall coverings in the bathroom.
- Non water absorbing insulation will be used and the walls will be constructed using concrete blocks.
- Corrosion resistant fittings such as galvanised or stainless steel will be used.
- Where possible on the electric cables will be fed from above and the floor sockets will be raised from the ground.

- The internal ground floor doors will be solid in construction and appropriately sealed.

The said mitigation measures will allow the development to comply with the requirements of TAN 15.

Compliance with TAN15	
Is the site flood free during a T200 and Q100 events for the design life of the development	Yes
Is the risk of flooding manageable during a 1 in 1000 event for the design life of the development	Yes
Does the development increase the risk of flooding to third parties	No
Can the site be evacuated safely	Yes

4 FLOOD RESPONSE

Although the site is expected to remain flood free during a T200 event, for the life span of the development, potentially the site could remain at risk during an exceptional event.

The compound will subscribe to the Natural Resources Wales flood warning scheme, which uses the latest technology 24 hours a day to monitor rainfall, river levels and sea conditions. Combined with weather data and tidal reports from the Met Office, they can provide local area forecasts on the possibility of flooding and its likely severity.

Four different kinds of flood warning codes are issued. Three of the codes indicate the severity of the warning, and a fourth is an 'all clear', meaning the threat has passed. NRW ensure warnings are broadcasted on local radio and television, and information can also be obtained through their dedicated Floodline information service (0345 988 1188) or on their website, which is updated regularly when there is a flood risk.

The amount of warning that can be expected prior to an event depends on the source of the floodwater. A few days warning could be provided before a tidal event while only a few hours (or less) can be expected during a fluvial or surface water event. In some circumstances it may not be possible to provide a warning. In this instance as the main source of potential flooding is tidal a reasonable evacuation period is anticipated (days).

A member of the family will be designated as a Flood Warden (the name is not important, but it will be the person in charge of making flood related decisions particularly during an event) and the remaining residents will be made aware who this person is. All the family and visitors will be made aware of the risk of flooding and the procedures in place in the event of a warning being received.

On arriving on site visitors will be made aware, via a notice, of the risk of tidal flooding at the site (simple signage). When necessary, they will also be made aware of the procedures that are in place, and should be followed, if a warning is issued.

On receipt of a flood warning from NRW, all the family, and visitors, will be made aware that a warning has been issued and its severity. A decision will be made on whether to evacuate to a safe location, away from the coast, or to remain on site. Prior to evacuating the compound all utilities will be switched off at the mains (electricity, water etc). No person will be allowed to return to the site until after the "all clear" has been given by NRW.

If, for whatever reason, water is seen to flow onto the adjacent road preventing a flood free access route then all should retreat to the static caravan, which is expected to remain flood free, and stay until the flooding has dissipated. An emergency flood kit will be kept in the caravan and maintained on a regular basis. The kit will include a torch, radio, food, water, a first aid kit and family entertainment.

If it subsequently becomes necessary to leave the site during an event (eg medical emergency) then the emergency access route should be followed as displayed. The route will be via a side entrance across council owned land and up to Brunel Way.



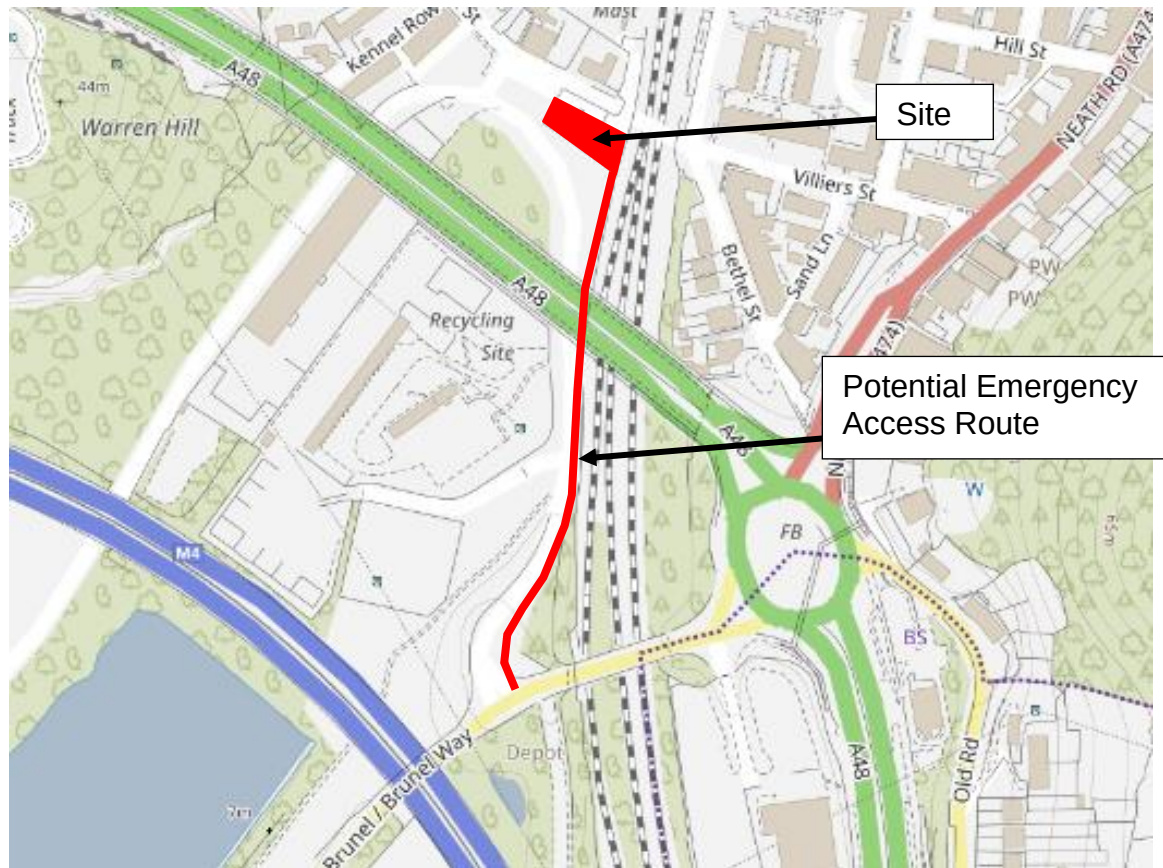
Plate 4.1 - Emergency Access Route onto Council Land

A clear plan, showing the flood response procedure, is to be kept in a prominent position. The plan will be accessible to all to make them aware that the area is in a flood risk zone and what procedures are in place to safely evacuate the site.

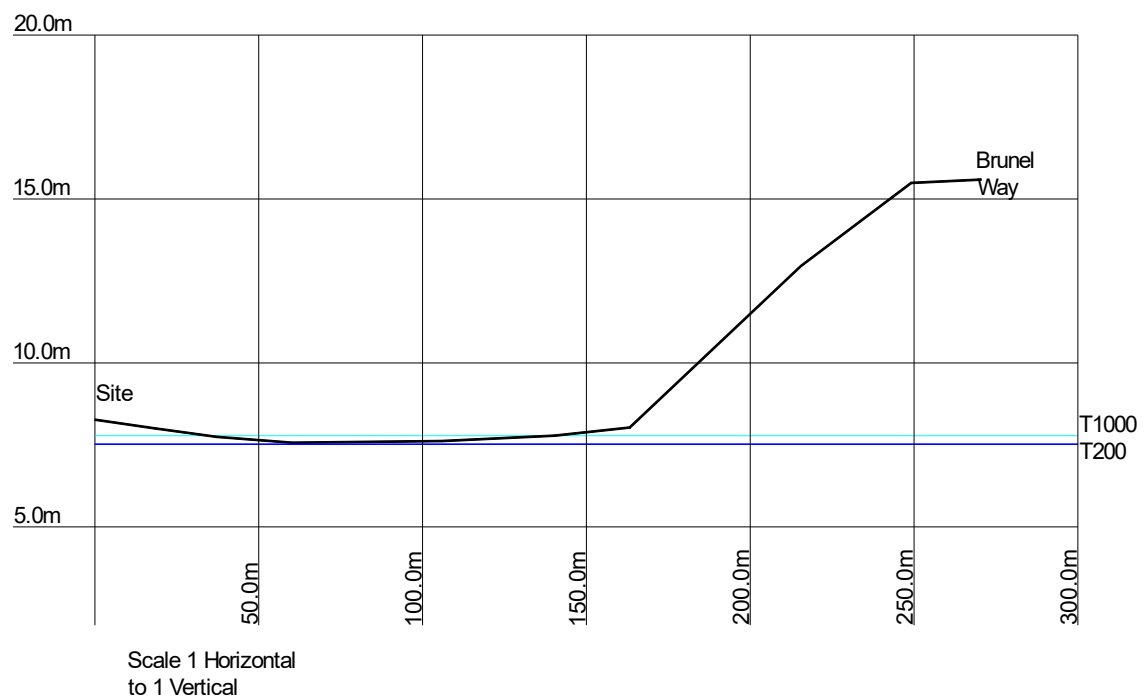
This plan is to be reviewed as necessary, but at least annually, and is to be kept in good order.

APPENDIX A - Flood Evacuation Procedure

Evacuation Route



Potential Emergency Evacuation Route



Section Through Evacuation Route From The Site To Brunel way

FLOOD RESPONSE INSTRUCTIONS

1 When a flood warning is issued to these premises, please advise the Flood Warden as named below:

Flood Warden _____

Work Hours Tel. _____

Out of Office Tel. _____

2 Ensure all present at the compound are aware that a flood warning has been issued, by Natural Resources Wales.

3 Flood door to the day room to be closed.

4 Prior to evacuating the site, all utilities are to be switched off.

5 In the event of flood water being seen on the highway, in front of the normal access, refuge will be sought in the static caravan until the flood waters have dissipated.

6 Once evacuated, do not re-enter the premises until instructed, by the recognised authority, that it is safe to do so.

7 If necessary, it will be possible to evacuate the site safely during an event by following the emergency access route.

Emergency Contact List		
Organisation	Telephone General	Telephone Out of Hours
NRW Floodline	03459 881188	03459 881188
NRW General	03000 653000	03000 653000
South Wales Police	101	999
Fire and Rescue Service	0370 6060699	999
Ambulance Service	01792 562900	999
Dwr Cymru - Welsh Water	08000 853968	08000 853968
Western Power	08000 963080	08006 783105 /105
RSPCA	03001 234999.	03001 234999.
Neath Port Talbot Council	01639 686868	
Briton Ferry Town Council	01639 824042	
