

SWANSEA FORESHORE ICE CREAM PARLOUR

Scope

1. BRIEF

This instruction is to undertake a desk based assessment for an area of land between Swansea City council offices car park and Marriott hotel car park to build a 3 storey building that will comprise of a Ground floor restaurant and ice cream parlour, 1st floor staff welfare facilities and 2nd floor Manager's apartment.

1.1 PROPOSED DEVELOPMENT

A 3 storey commercial building. Ground floor will contain a restaurant and ice cream parlour. 1st floor will house the staff welfare facilities and the 2nd floor will contain a Manager's apartment.

2. SITE DESCRIPTION AND RECONNAISSANCE

Address	<i>Land located between and south of Swansea City Council County Hall and Marriott Hotel, SA1 3SN and SA1 3SS</i>	
Current Site use and description	<i>The site is used as a car park with a public walking path through the middle.</i>	
National Grid Reference	6,541,892,291	
Surrounding land use	North	<i>Car Park for the Marriott Hotel</i>
	South	<i>Beach area and coastal Path</i>
	East	<i>Marriott Hotel</i>
	West	<i>Swansea Civic County Hall</i>

2.1 SITE WALKOVER

A site walkover was undertaken by Emilie Driscoll on 12 Dec 2018. The weather was overcast but dry. During the walkover, manhole covers were found along the site and some mounds. No other issues were noted. More site photographs in Appendix A.



South entrance to site. Possible drainage or sewerage system? Driscoll, E (2018)

3. SITE HISTORY

Historical maps dating from 1900 through to the 2018 have been obtained and reviewed. The relevant information is summarised in the following table. The historical maps obtained have been included in Appendix B.

Date	On Site Observations	Off site observations
1900	A railway track is running through the middle of the site. There are also what looks like residential streets in the middle of the site.	Sawmill built to the East of the site
1920	No significant changes	There appears to be an Engine shed and railway tracks running through the proposed site as well as Cannister works. To the north there appears to be residential buildings.
1930	No significant changes	No significant changes are shown on maps
1948	There appears to be a paint factory located on the site as well as some warehouses	Wharehouses have been built to the east of the site
1970	No buildings are marked on the site. The warehouses are still there.	The railway tracks are no longer shown on the map as well as the engine shed and cannister works.
1980	Warehouses have appeared to be removed	A car park to the east has been built as well as the civic center to the west.
2018	The land is made up of part concreted areas to the north and north west. Grassy mounds eiter side of a public walkpath.	A hotel and annexes are to the right of the site and a county hall has been built to the west.

3.1 HISTORICAL SUMMARY

The historical maps indicate that the land has had many uses over the last 200 years. It suggests that the land more than likely contains industrial contamination and that the site would require further investigating.

4. GEOLOGY, HYDROLOGY AND HYDROGEOLOGY

4.1 GENERAL GEOLOGY AND GROUND CONDITIONS

The geology underneath the site has been taken from the British Geological Survey (BGS) 1:10,000 digital geological map of Great Britain. A map and data locators are located at Appendix C.

4.1 MINING AND QUARRYING ACTIVITIES

A review of the available information obtained indicates the following extraction, coal mining and associated activities:

According to the coal mining board. (2018) there could be a coal line running underneath the site.

4.2 LANDFILL AND WASTE SITES

A review of the available information obtained indicates that there is a high possibility that the site has been used for landfill or waste.

4.3 RADON

A Radon report will need to be generated as no information has been found through the desk study.

5. REVIEW OF ENVIRONMENTAL DATABASES

5.1 INDUSTRIAL SITES HOLDING AUTHORISATIONS, PERMITS AND LICENCES

Information indicates that there are no records of Part A (1) and IPPC Authorised Activities within 500m of the site.

5.2 DESIGNATED ENVIRONMENTALLY SENSITIVE SITES

The site is within 500m of an environmentally sensitive site as it is within 500m of the seafront.

5.3 ENVIRONMENT AGENCY RECORDED POLLUTION INCIDENTS

UNKNOWN

5.4 SITES DETERMINED AS CONTAMINATED LAND UNDER PART 2A

There could be contaminated land within 250m of the site.

5.5 RECORDS OF POTENTIALLY CONTAMINATIVE INDUSTRIAL SITES

Yes. See table below.

5.6 PETROL AND FUEL SITES

The nearest petrol or fuel site is over 1000m away.

6. DEVELOPMENT OF CONCEPTUAL MODEL

6.1 CONTAMINATED LAND BACKGROUND INFORMATION

The Environmental Protection Act 1990 Part 2A, as amended, provides a statutory definition of contaminated land. To fall within this definition it is necessary that, as a result of the condition of the land, substances may be present in, on or under the land such that:

- (a) Significant harm is being caused or there is significant possibility of such harm being caused;
or
- (b) Significant pollution of controlled waters is being caused or there is a significant possibility of such pollution being caused.

Risk from contamination is assessed by consideration of possible linkages between contaminate sources and potential receptors via pathways which is usually termed a conceptual model.

6.2 Insert table

RISK ASSESSMENT

The risk of significant harm or pollution of controlled waters has been assessed as qualitatively as low, medium or high.

There is a high risk of finding contaminants on the land from the desk study.

7. CONCLUSIONS AND RECOMMENDATIONS

Emilie Driscoll has been instructed on behalf of the company to undertake a desk based contaminated land assessment on the land between Swansea Civic Centre and Marriott Hotel. A walkover survey has also been carried out.

Appendix A: MAP OF AREA AND LOCATION OF SITE

Appendix B: HISTORICAL MAPS

Appendix C: ENVIRONMENTAL MAP

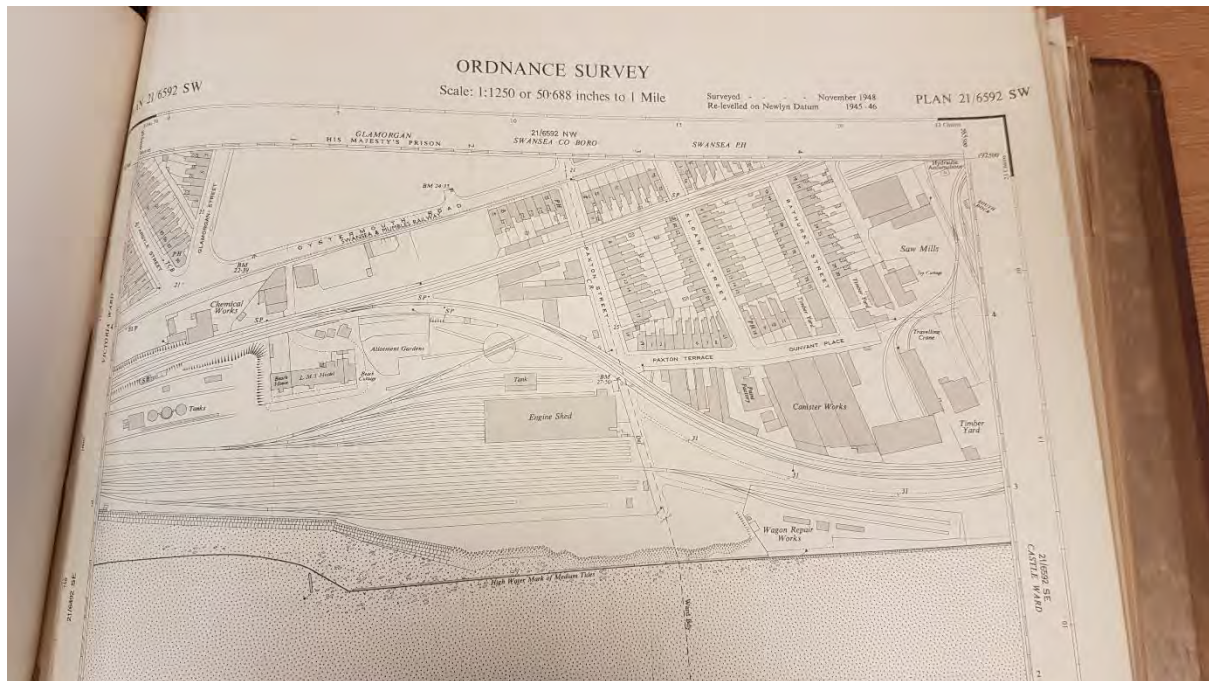
APPENDIX A



APPENDIX B



1920 Map



Swansea (1948)

APPENDIX C



References:

Historical Site images (2018) Available at:

<https://digimap.edina.ac.uk/>

(Accessed Dec 2018-Feb 2019)

Ordnance Survey (1948), Swansea Map Plan21/6592 SW

Coal Mining Board (2018) Available at:

<http://mapapps2.bgs.ac.uk/coalauthority/home.html>

(Accessed 27 Dec 2018)

Recommendations

Due to the historical find findings from the desk study, the following investigations are recommended:

TRIAL PIT

Trial pits are recommended on the site due to the possibility of contaminated land. In the desk study, historical maps show that a railway line ran across the site. It is suggested that 9 pits be dug at a depth of 4.5m each. The map below highlights where the holes are required.

It is suggested that a CAT scanner is used before any digging starts to check for any cables or utilities. A small mini digger will be a more cost effective option and easier/less disruptive to those nearby.

UTILITIES

Utility and service companies in the area will need to be contacted.

GAS INVESTIGATION

No information was found regarding Radon Gas in the desktop study. It is suggested that a test is carried out as there could be other gases if the site was indeed used as landfill.

WATER TABLE

Being so close to the sea, the site will need to be investigated for the water table level and flood risk.

CONCLUSION

If contaminants are found from the investigations, Swansea council are to be notified.



+ =Trial Pit locations

It is also recommended that the following risks are identified:

Safety	Where	Risk	Notes
<i>Fencing</i>	Around the perimeter of the two sites	To stop the general public and not competent from entering the site	Boarding to be used at a height of 6ft to stop people climbing into the site. Will also prevent the public from breathing in any dusts or fumes.
<i>Storage of Materials &</i>	On site 1	Theft of materials and tools	Hire of 6ft lockable steel container
Waste Skip	Two required, one on each site	To keep the area clean & tidy.	Make sure that the correct waste is out into the skip.
Welfare	1 x Canteen & Seating area in site 1	Electrical appliances	Must have hot water and cleaning facilities. Bottled water to be bought for drinking. Welfare facility to be stocked with utensils. Electrical testig of equipment before use.
Main Office	Located on site 1	Electrical appliances	Testing of appliances before use. To be used for day to day work. Wifi required.
Meeting Room	Located on site 1	Electrical appliances	Testing of appliances before use. To be used for day to day work. Wifi required. To be used as a site induction/ sign in office.