Environmental Permit - Variation
Celsa Manufacturing (UK) Ltd, Swansea Docks, Lockhead, Kings Dock, Swansea, SA1 1QR
Permit No. EPR/AB3891FT

On behalf of:
Celsa Manufacturing (UK) Ltd

Project Reference:
019-1691

Revision:
REV 00

Date:
April 2019

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Document Control Record				
Revision	**Date**	**Author(s)**	**Authorised by**	**Reason for Change**
00	17/07/19	MS	SPR	First draft issue to Client

Contents

Abbreviations

BAT	Best Available Technique
BGS	British Geological Survey
BREF	Best Available Techniques Reference Documents
DEFRA	Department for Environment Food and Rural Affairs
EA	Environment Agency
EAME	Earth and Marine Environmental Consultants Ltd
EMS	Environmental Management System
EPR	Environmental Permit
FRA	Flood Risk Assessment
FPMP	Fire Prevention Mitigation Plan
IBC	Intermediate Bulk Container
LEV	Local Exhaust Ventilation
mg/l	milligrams per litre
NGR	National Grid Reference
NRW	Natural Resources Wales
Opra	Operational Risk Appraisal
PPE	Personal Protective Equipment
PPM	Planned Preventative Maintenance
RPE	Respiratory Protective Equipment
SCR	Site Condition Report
SSSI	Site of Special Scientific Interest
µg/l	micrograms per litre

1 Introduction

1.1 Background

This document has been prepared by Celsa Manufacturing (UK) Ltd (Celsa) and its environmental consultant Earth & Marine Environmental Consultants Ltd (EAME) in support of an environmental permit variation (Waste Operation Regulated Facility) as required under Regulation 20 of the *Environmental Permitting (England and Wales) Regulations 2016*.

This variation is in relation to operations undertaken at Swansea Docks, Lockhead, Kings Dock, Swansea, SA1 1QR (*Annex A – Figure A1*). The Authorised company contact is Mr. Richard Lewis (Celsa Manufacturing (UK) Ltd, Environmental Manager).

An environmental permit (EPR) is required where an operator carries out certain prescribed activities, namely installations that undertake Schedule 1 activities, a waste operation or a mobile plant (carrying out either one of the Schedule 1 activity or a waste operation). Celsa operates a scrap metal yard. Using the flow chart in RGN2, the activity would be classified as Waste Operation Regulated Facility (R13 Storage of waste pending any of the operations numbered R1 to R12 and R4 Recycling/reclamation of metals and metal compounds). The activity description is a Tier 3 bespoke permit for a mixed metal recycling activity (Opra charged activity) with a discharge to surface water.

The status log of the permit is outlined within *Table 1.1*.

Table 1.1: Permit No. EPR/AB3891FT Log

Description	Date	Comments
Application (EPR/AB3891FT/A001)	Duly Made 08/11/17	Application for mixed metal facility
Additional information received in response to Schedule 5 notice	26/11/18	Consisting of Information on waste codes, Updated Site-specific risk assessment, Updated Fire Prevention & Mitigation Plan and Noise and Vibration Management Plan.
	05/02/18	Updated Fire Prevention & Mitigation Plan
Permit determined EPR/AB3891FT	27/04/18	Permit issued to Celsa Manufacturing (UK) Limited

Table 1.1: Permit No. EPR/AB3891FT Log		
Application EPR/AB3891FT/V002	Duly Made 21/09/18	Application to vary to add a waste treatment activity.
Additional information received in response to Schedule 5 notice	17/10/18	Updated Fire Prevention & Mitigation Plan
Variation determined EPR/AB3891FT		Varied permit issued.

The document represents the variation report submitted as part of the application package to the NRW (EAME Ref. 019-1691).

The report has been produced in accordance with the NRW's current Guidance (*Table 1.2*).

Table 1.2: Technical Standards and Guidance	
Type	**Reference**
EPR Guidance	NRW (2014). How to comply with your environmental permit, Version 8, October 2014. Defra (2019). Develop a management system: environmental permits. https://www.gov.uk/guidance/develop-a-management-system-environmental-permits. Defra (2018). Control and monitor emissions for your environmental permit. https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit.

Table 1.2: Technical Standards and Guidance	
Type	**Reference**
Horizontal Guidance	Defra (2016). Risk assessments for specific activities: environmental permits, https://www.gov.uk/government/collections/risk-assessments-for-specific-activities-environmental-permits, 2 February 2016. H1 software tool and guidance. Defra (2016). Energy efficiency standards for industrial plants to get environmental permits, 1 February 2016. H2 Energy efficiency. Environment Agency (2004). Integrated Pollution Prevention and Control (IPPC) Horizontal Guidance for Noise H3 Part 2 – Noise Assessment and Control, Version 3, June 2004. NRW (2014). How to comply with your environmental permit, Additional guidance for: H4 Odour Management, Version 2, October 2014. NRW (2014). Environmental Permitting Regulations, Guidance for applicants H5, Site condition report – guidance and templates, Version 5.0, October 2014.
BREFs	European Union (2012). Establishing the best available techniques (BAT) conclusions under Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions for iron and steel production (2012/135/EU). European Union (2013). Best Available Techniques (BAT) Reference Document for Iron and Steel Production.
Sector Guidance	NRW (2017). Fire Prevention & Mitigation Plan Guidance – Waste Management, Guidance Note 16, Document Owner: Regulatory Business Board, Version 2.0, August 2017. NRW (2014). Metal Recycling Industry Environment Management Toolkit Waste Sector - Metal Recycling Sites, Version 2.0, October 2014. EA (2013). S5.06 Guidance for the Recovery and Disposal of Hazardous and Non-Hazardous Waste, Version 5, May 2013. Environment Agency (2004). IPPC Guidance, Production of Coke, Iron and Steel, S2.01, Issue 1, June 2004.

The variation application package includes completed application forms that are cross-referenced to this technical submission, which is intended to address all the areas required by the variation application. The various documents included with this application package are set out below:

- completed application forms (Part A, Part C4 and Part F1);
- non-technical summary;
- technical submission (this report);
- technical submission (supporting information);
    - Environmental Risk Assessment
    - ECP39 Swansea Scrap Yard Environmental Management Plan REV 3
    - ECP40 Fire Prevention & Mitigation Plan REV 6
    - ECP41 Noise and Vibration Management Plan REV 1
    - Celsa Companies House Certificate
    - Celsa ISO14001 and EMAS Certificates 2017
- completed Opra assessment spreadsheet (NRW provided version - PAN-002062 A001 Reviewed OPRA 30/11/17);
- Mr Richard Lewis Permit Application Authorisation (26/03/19) – letter from Celsa Managing Director to submit application;
- the application fees;

The above items should be regarded as constituting the variation application. In-line with the Form F1 guidance the variation application includes 1 x CD and 1 x paper copy of the application package.

The application has been submitted (via recorded delivery) to the Natural Resources Wales, Permit Receipt Centre, Natural Resources Wales, Cambria House, 29 Newport Road, Cardiff, CF24 0TP. Email: permitreceiptcentre@naturalresourceswales.gov.uk

The remainder of this document outlines the requirements requested by the NRW to progress the permit variation application.

1.2 Operational Risk Appraisal (Opra)

The fees associated with this application **(£7,645)** have been calculated using the current Opra spreadsheet (NRW provided version - PAN-002062 A001 Reviewed OPRA 30/11/17) as agreed with the local NRW Environment Officer.

1.3 Payment Details

Celsa Manufacturing (UK) Ltd has paid the application fee via BACS to the following account:

- Company name – Natural Resources Wales
- Company address – Income Dept. PO Box 663, Cardiff, CF24 0TP
- Bank – RBS
- Address – National Westminster Bank PLC, 2 Devonshire Square, London, EC2M 4BA
- Sort code – 60-70-80
- Account number – 10014438
- Payment reference number – EPRCELSAMANU0001

Notification of payment has been sent (including reference number) to: banking.team@cyfoethnaturiolcymru.gov.uk.

2 Operations

2.1 Introduction

The waste processing and storage activities meets the description of an installation as defined as a Tier 3 bespoke permit for a mixed metal recycling activity[1] *i.e.* R13 Storage of waste pending any of the operations numbered R1 to R12; and R4 Recycling/reclamation of metals and metal compounds.

The specific changes included within this variation are:

- change in operating hours;
- revised scrap metal storage capacity to enable efficient movement of material via ship;
- extension of the current permit boundary;
- movement of current weighbridge and addition of a second weighbridge;
- movement of the offices and employee car park;
- revised site layout including orientation and location of unprocessed and processed scrap metal stockpiles;
- installation of a new small scrap metal screening plant (pre-conveyor magnetic separator);
- replacement of the existing shear with new unit with higher processing throughput; and
- installation of new larger (self-bunded) above ground diesel storage tank.

The various locational changes are outlined within *Figure 2.1*. Details regarding process and equipment changes are described within the following sections.

1 Environment Agency (2015). Regulatory Guidance Series, No. RGN 2 Understanding the meaning of regulated facility, Version 3.1. May 2015.

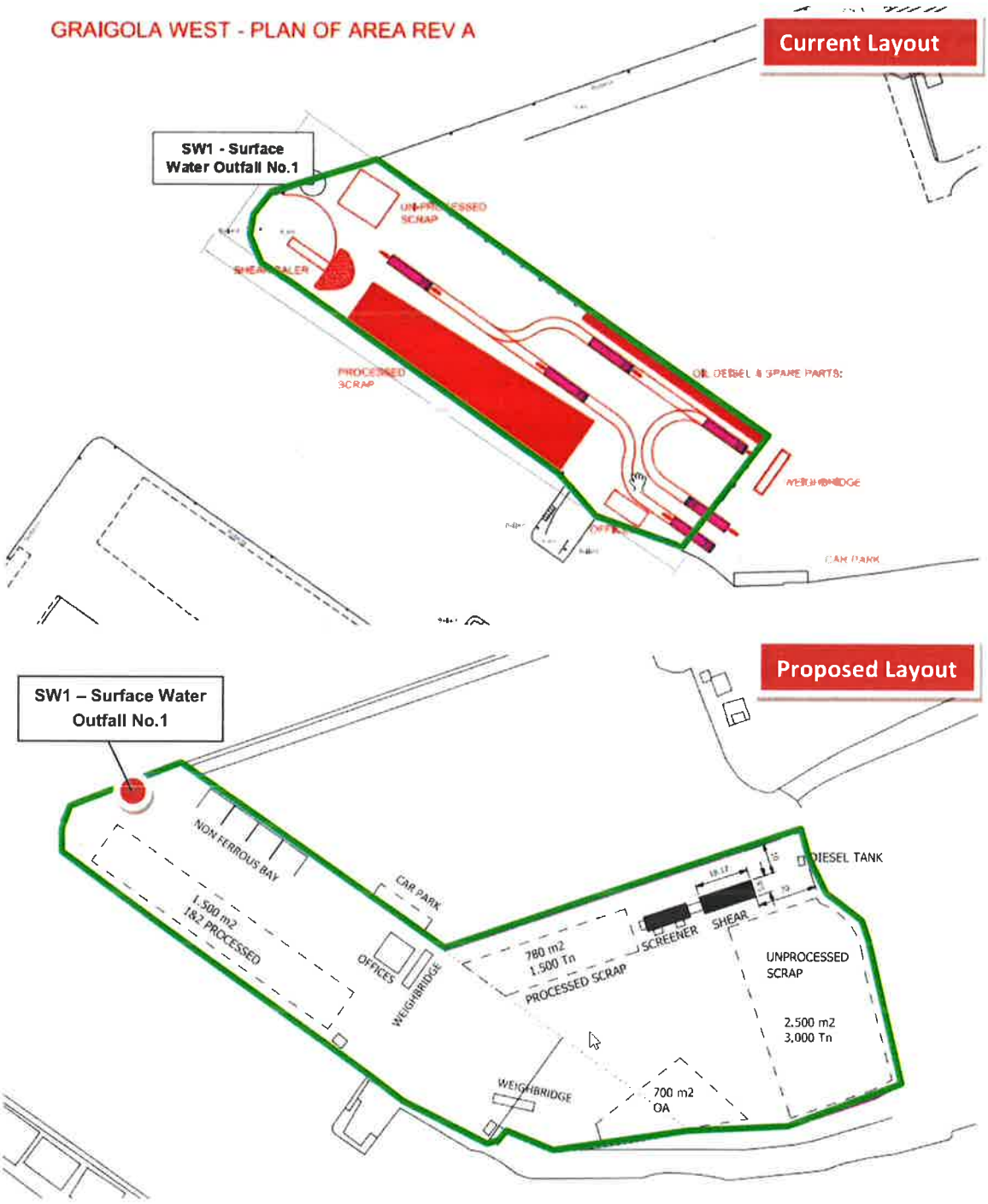


Figure 2.1: *Current and proposed site layouts (permit boundary in green)*

2.2 Waste Acceptance - Types of Waste

No new waste streams (EWCs) are proposed as part of the variation.

2.3 Avoidance, Recovery and Disposal of Wastes

The site is a scrap metal recovery operation. The only waste disposal which will occur will be due to (i) unrecoverable elements and (ii) dirt and fines (19 12 12) within the incoming waste streams. Contractual agreements and operational procedures will aim to minimise the amount of waste disposal from the facility.

No new waste disposals (EWCs) will occur due to this variation application.

2.4 Waste Acceptance – Volume of Waste

No changes to the total volume of waste received and processed at the site are proposed.

The proposal is to increase storage volumes of processed scrap metal within the permitted area to enable (as an option) the efficient export of processed scrap metal (via ship) to Spain. In order to achieve this, there needs to be at least 3,000 tonnes of processed scrap metal on the dockside ready for vessel loading. To enable this Celsa proposes to increase the number of processing hours to ensure that, at the end of each day, there is approximately 3 days of processed stock remaining within the installation boundary. This equates to approximately 600 tonnes.

Where this route is taken less road transfers to Celsa Cardiff will occur. An example scenario is provided below (this assumes 4,000 tonnes per month transfer from Swansea to Cardiff):

- Current road transfers – 4,000 tonnes equate to 166 HGV movements/month (Swansea to Cardiff);
- Proposed vessel/road transfer – 3,000 tonnes (vessel/month) and 1,000 tonnes (Swansea to Cardiff) equates to 41 HGV movements/month.

Therefore, it is requested that the maximum storage capacity (at any one time) is increased from the current 5,000 tonnes to a maximum of 7,000 tonnes. The proposed future limits are outlined within *Table 2.2* with proposed changes outlined in red.

Table 2.2: Proposed waste volumes				
	Annum	Month	Week	Day
Total Waste Input (tonnes per annum)	120,000	10,000	2,500	417
Ferrous Recovery (tonnes per annum)	112,800	9,400	2,350	392
Non-ferrous Recovery (tonnes per annum)	3,600	300	75	13

Maximum Storage Capacity (at any time)	7,000 tonnes

2.5 Waste Acceptance – Procedures

No changes to the principal waste acceptance procedures are required. The process flow chart for the operations is outlined in *Figure 2.2*.

2.6 Waste Export – Procedures

Celsa would propose to use the new online system for International Waste Shipments (IWS) where International Transfrontier Shipments of Waste (TFS) is to occur. Notification and movement forms will be obtained from NRW prior to all planned movements.

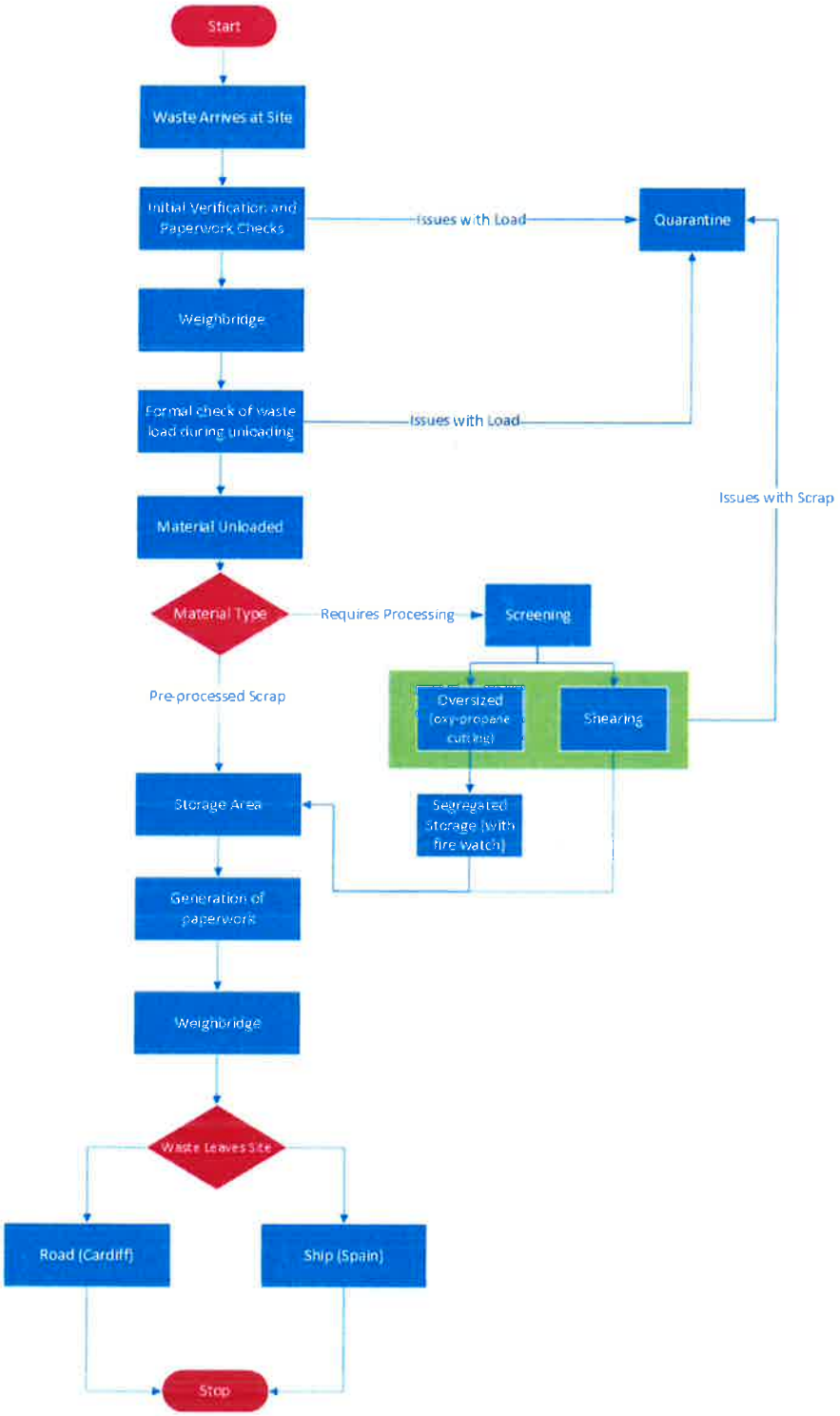


Figure 2.2: *Process flow chart (scrap metal acceptance and processing)*

2.7 Site Activities

The Site will continue to process scrap metal using shearing and a hand-held oxy-propane cutting kit (where required). Supporting activities will include storage of incoming scrap metal, storage of processed scrap metal, equipment refuelling from an on-site above ground storage tank (compliant with *The Water Resources (Control of Pollution) (Oil Storage) (Wales) Regulations 2016*), two weighbridges, general waste storage area and a welfare cabin.

The proposed variation includes a revision to the current operating hours to allow for increased processing flexibility (*Table 2.1*).

Table 2.1: Operating Hours

Current	Proposed
Monday to Friday: 8:00 – 18:00 Saturday: 9:00 – 17:00 Sundays and Bank Holidays: No operations	Monday to Friday: 6:00 – 18:00 Saturday: 6:00 – 17:00 Sundays and Bank Holidays: 06:00 – 14:00

2.7.1 Scrap Storage (Processed and Unprocessed)

All scrap metal will be unloaded within the (revised) permitted boundary and stored in separate piles (either processed or unprocessed) on good quality engineered tertiary containment surfaces suitable for the storage of scrap metal.

As previously the facility will store and process the following grades of scrap (in-line with the revised 2006 British Metals Recycling Association specifications):

- Grade AO – Plate and structural, consisting of cut structural and plate arisings predominantly 6 mm thick in sizes not exceeding 1.50 m x 0.60 m x 0.60 m (or as otherwise agreed) prepared in a manner to ensure compact charging. May include properly prepared wagon material less than 6mm thick. Excludes tube and hollow section.

- Grade 1 – Old Steel, predominantly 6 mm thick, in sizes not exceeding 1.50 m x 0.6 0m x 0.60 m (or as otherwise agreed) prepared in a manner to ensure compact charging. May include tube and hollow section, wire rope properly prepared by agreement with consumer, properly prepared material from heavy commercial vehicles including wheels, but excluding body and wheels from light vehicles.

- Grade 2 – Old Steel, predominantly 3 mm thick, in sizes not exceeding 1 m x 0.60 m x 0.60 m (or as otherwise agreed) prepared in a manner to ensure compact charging. May include properly prepared material from dismantled vehicles including light vehicle wheels but must exclude vehicle body arisings and domestic appliances.

As part of the revised and extended permit boundary the re-organisation will allow the facility to store processed and unprocessed scrap metal in a more efficient manner whilst freeing up dock-side space for the proposed export material. The revised storage areas are as follows:

- Area 1 – 2,500 m^2 of unprocessed Grade 1&2.
- Area 2 – 780 m^2 of processed Grade 1&2 scrap awaiting transfer to Celsa Cardiff.
- Area 3 – 700 m^2 of unprocessed Grade OA scrap. The decision whether to process using the shear or hand-held oxy-propane cutting kit will depend on material width.
- Area 4 – 1500 m^2 of processed scrap awaiting export to Spain.

The reorganised stockpiles (unprocessed and processed) are outlined within *Figure 2.3*.

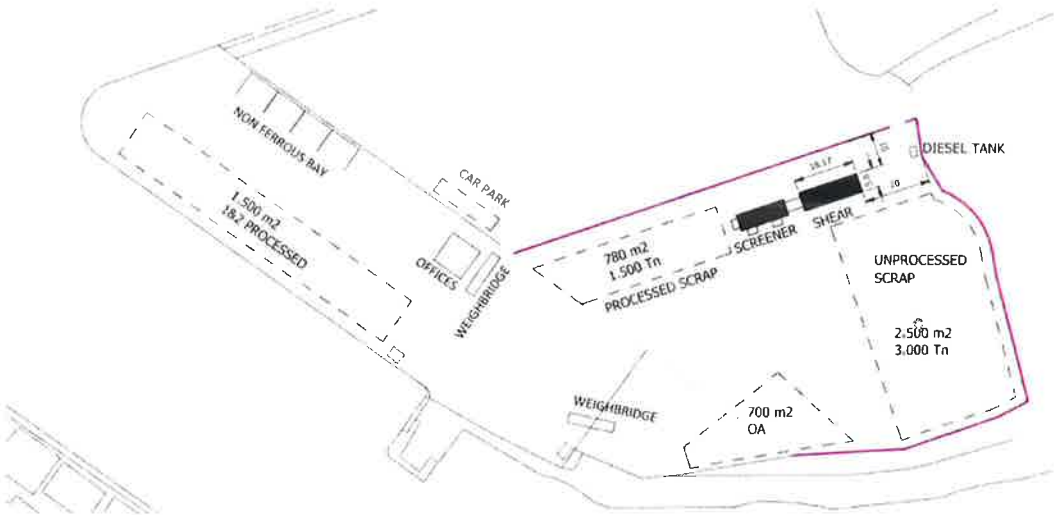


Figure 2.3: *Process layout (scrap metal acceptance and processing)*

Source: Layout T800-C LSx7 000.pdf

The volume, location and maximum size of the piles is outlined within the submitted Fire Prevention and Mitigation Plan (FPMP) that complies with current guidelines[2].

2.7.2 Screening

The site proposes to install a pre-conveyor magnetic separator prior to the shear (*e.g.* Ambisort Recycling PS-R200/600) as outlined in *Figure 2.4* to improve the cleanness/quality of the scrap.

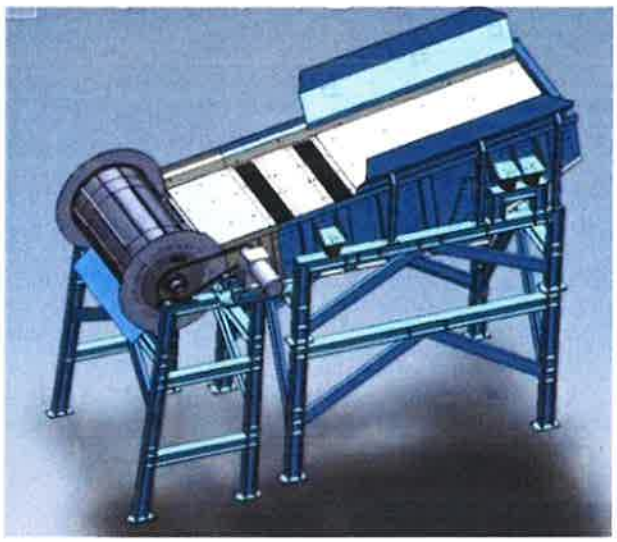


Figure 2.4: *Proposed scalping screen (Terex Finlay 883+)*

A conveyor belt carries the incoming (unprocessed) material over a powerful magnetic head pulley to automatically remove steel and ferrous materials while aluminium products fall into a separate collection container.

2.7.3 Shearing

The proposal is to upgrade the existing shear from the current 650 tonne to a slightly larger and more powerful 850 tonne shear (*Figure 2.5*). The new shear will increase shearing capacity by approximately 33 %. The existing shear will be removed once the new shear is in place and the transition backlog of scrap metal has been processed.

2 NRW (2017). Fire Prevention & Mitigation Plan Guidance – Waste Management Guidance Note 16, Document Owner: Regulatory Business Board, Version 2.0, July 2017.

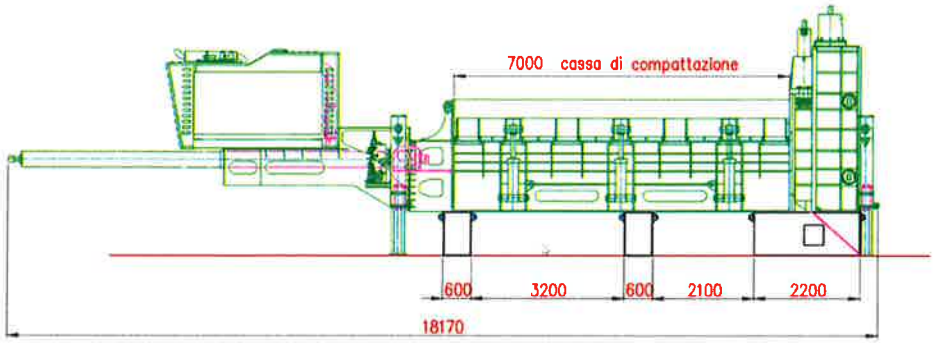


Figure 2.5: *Process flow chart (scrap metal acceptance and processing)*

Source: Layout T800-C LSx7 000.pdf

The new shear will be located away from the current dock side *i.e.* moved to allow processed scrap storage prior to vessel loading.

2.7.4 Cutting

No changes are proposed. Activity is already part of the permit.

2.7.5 On-site Refuelling

As part of the installing the revised shear the facility proposes to revise the fuel storage arrangements. This includes:

- installation of new 8,000-litre self-bunded above ground tank. The tank will be fully complaint with *Control of Pollution (Oil Storage) (Wales) Regulations 2016*; and
- moving the bulk fuel storage location approximately 12 metres from the new shear (within the extended yard area). This will remove the tank from the existing compound.

No other changes are proposed. Activity is already part of the permit.

2.7.6 General Waste Storage

No changes are proposed. Activity is already part of the permit.

2.7.7 Welfare Facilities

No changes are proposed. Activity is already part of the permit.

3 Managing the Activity

3.1 General Management

Celsa Manufacturing (UK) Ltd has implemented and maintains an Environmental Management System (EMS) that is certified to ISO14001:2015 (Certificate No. ES081434) and EMAS (Reg. No. UK-000178).

The EMS continues to be maintained and is externally audited (by Bureau Veritas) whilst delivering all indicative Best Available Technique (BAT) requirements for an effective management system.

Celsa Manufacturing (UK) Ltd also operates a certified OHSAS18001:2007 Occupational Health and Safety Management System. These systems will also be applied at the Swansea Scrap Yard.

The Swansea Scrap Yard will be audited (by Bureau Veritas) under the existing certifications.

3.2 Operations and Maintenance

No changes are proposed to the existing systems (as stated in the original application).

3.3 Accidents

No changes are proposed to the existing Accident/Pollution Management Emergency Plan (as stated in the original application).

Celsa Manufacturing (UK) Ltd has established and will maintain a stand-alone Fire Prevention and Mitigation Plan in-line with NRW Guidance[2]. This has been revised in-light of the proposed additional shear and incoming/processed stockpiles.

3.4 Incidents and non-conformances

Accidents, Incidents, complaints and non-conformances are to be handled through the existing processes that form part of the ISO 14001 EMS.

3.5 Site security

The wider-site (Port of Swansea) is subject to Associated British Port (ABP) security control via the access point from Baldwins Crescent. The site itself is surrounded by a 2.4-metre-high palisade fence. All access on to site will be controlled by the Scrap Yard Manager. No unauthorised access will be permitted. The site will be fitted with permanent CCTV.

3.6 Sufficient competent persons and resources

The total manning of the site can vary dependent upon the level of activity being undertaken. Based on proposed current activities there will be between 2 and 8 people at any one time. These provide engineering, technical, transport, administration and environmental support. Celsa Manufacturing (UK) Ltd will provide a comprehensive training programme for the site and the proposed operations in-line with the competency requirements operated at the Cardiff site (*e.g.* general environmental awareness, maintenance and operational activities, accident and emergency response). This training will be provided to all site operatives.

3.7 Records that demonstrate your management system

Records relating to the operation of the site are to be handled through the existing processes that form part of the ISO 14001 EMS. All records relating to the operation of the installation will be maintained as per the stated procedures.

3.8 Access to your permit

Access to the permit will be through existing internal systems (*i.e.* intranet and on-site noticeboard). Where contractors undertake work within the site the requirements of the permit will be actively brought to their attention.

3.9 Permit surrender and closure

No changes to the previously proposed surrender/closure process have been identified.

4 Emissions to Air, Water and Land

4.1 Emissions to Air

4.1.1 Point source emissions to air

There are no point source emissions to air from the installation.

4.1.2 Fugitive emissions to air

The sources of potential fugitive emissions include emissions from diesel vehicles and plant and emissions of particulate due to materials handling and processing. These have been described and assessed within the original permit application. No significant changes are predicted.

The site is not located in a sensitive setting (with respect to air emissions) being located centrally in an industrial dock area.

4.2 Emissions to surface water

4.2.1 Point source emissions to surface water

No new point source emissions to surface water are proposed.

All surface water from the installation is captured and passes through a Class 1 full retention separator.

4.2.2 Fugitive emissions to surface water

There are no fugitive emissions to surface water.

4.3 Emissions to Sewer

4.3.1 Point source emissions to sewer

There are no point source emissions to foul sewer.

4.4 Emissions to Groundwater

4.4.1 Point source emissions to groundwater

There are no point source emissions to groundwater from the installation.

4.4.2 Fugitive emissions to groundwater

No fugitive emissions to groundwater have been identified because of the proposed variation.

The entire Site is composed of good quality engineered hardstanding to prevent fugitive emissions to groundwater (*i.e.* perched tidally influenced groundwater within the confines of the dock walls).

4.4.3 Odour

Celsa believe that the operations give no reasonable cause for offence or annoyance regarding odour.

No changes are required to current systems.

4.4.4 Pests

Based upon the nature of the proposed operations, the wastes being stored, handled and treated and their location no significant pest issues are anticipated. Thus, a pest management plan has not been produced.

No changes are required to current systems.

5 Noise and Vibration

The Site is located central with the Port of Swansea and is surrounded by industrial and commercial operations including other waste processing activities (*Figure 5.1*). The closest sensitive noise receptors are located 500 metres north of the Site beyond a series of other industrial and commercial activities.

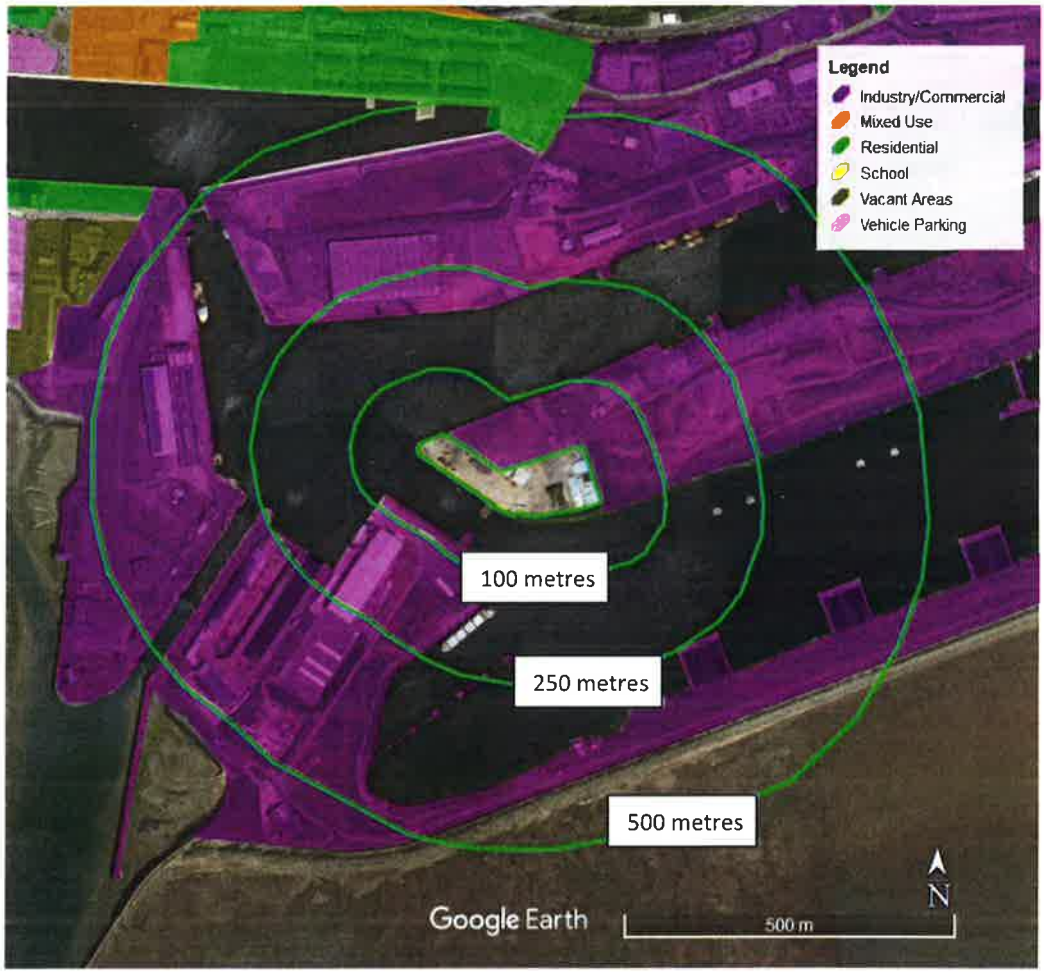


Figure 5.1: *Noise receptors surrounding the installation*

Google Earth Imaging with the permission of Google – Licensed to Earth and Marine Environmental Consultants Ltd.

The previously submitted noise and vibration management plan has been updated to reflect the additional screening plant and scrap metal shear. No operational or management system changes have been made to the noise and vibration management plan.

6 Monitoring

6.1 Monitoring of emissions to air

There are no point source emissions to air from the installation. No monitoring is required.

6.2 Monitoring of emissions to surface water

There is a single point source discharge from the installation to surface water **[Emission Point: SW1]**. As the discharge is not continuous and is derived solely of surface water run-off from the slab no direct monitoring is proposed. A correctly functioning separator should be able to achieve <5 mg/l of oil (under ideal conditions).

Visual assessment of the final discharge (*e.g.* presence of sheen or silty appearance) will be recorded within the Site Diary during discharge periods.

No new monitoring requirements have been identified due to the proposed variation.

6.3 Monitoring of emissions to sewer

Not applicable.

6.4 Monitoring of noise emissions

Based upon the nature of the proposed operations and their location (in relation to sensitive receptors) no significant noise or vibration issues are anticipated (*i.e.* the installation represents a very low risk). No formal environmental noise surveys are therefore proposed.

6.5 Monitoring of odorous emissions to air

Based upon the nature of the proposed operations and their location (in relation to sensitive receptors) no significant odours are anticipated (*i.e.* the installation represents a very low risk). No formal odour monitoring is therefore proposed.

7 Environmental Risk Assessment

7.1 Introduction

This section of the technical submission provides an assessment of the environmental significance of the emissions from the installation by looking at the Site in the context of its environmental setting and UK guidance for such assessments.

The EA's Horizontal Guidance Note H1 (Environmental Assessment and Appraisal of BAT) was withdrawn on 1st February 2016. Thus, the 'Risks from your Site' information on the www.gov.uk website has been utilised throughout the assessment process[3]. The website outlines the following risk assessment stages:

- Stage 1 – Identify and consider risks for your site, and the sources of the risks.
- Stage 2 – Identify the receptors (people, animals, property and anything else that could be affected by the hazard) at risk from your site.
- Stage 3 – Identify the possible pathways from the sources of the risks to the receptors.
- Stage 4 – Assess risks relevant to your specific activity and check they're acceptable and can be screened out.
- Stage 5 – State what you'll do to control risks if they're too high.
- Stage 6 – Submit your risk assessment as part of your permit application.

7.2 Receptor Identification

A revised Site Condition Report (SCR) gives a detailed account of the environmental setting of the site, including physical conditions and environmental sensitivities.

7.3 Risk Assessment

A revised risk assessment, using the approach outlined within *Section 7.1*, has been prepared and the results are provided in *Annex C*.

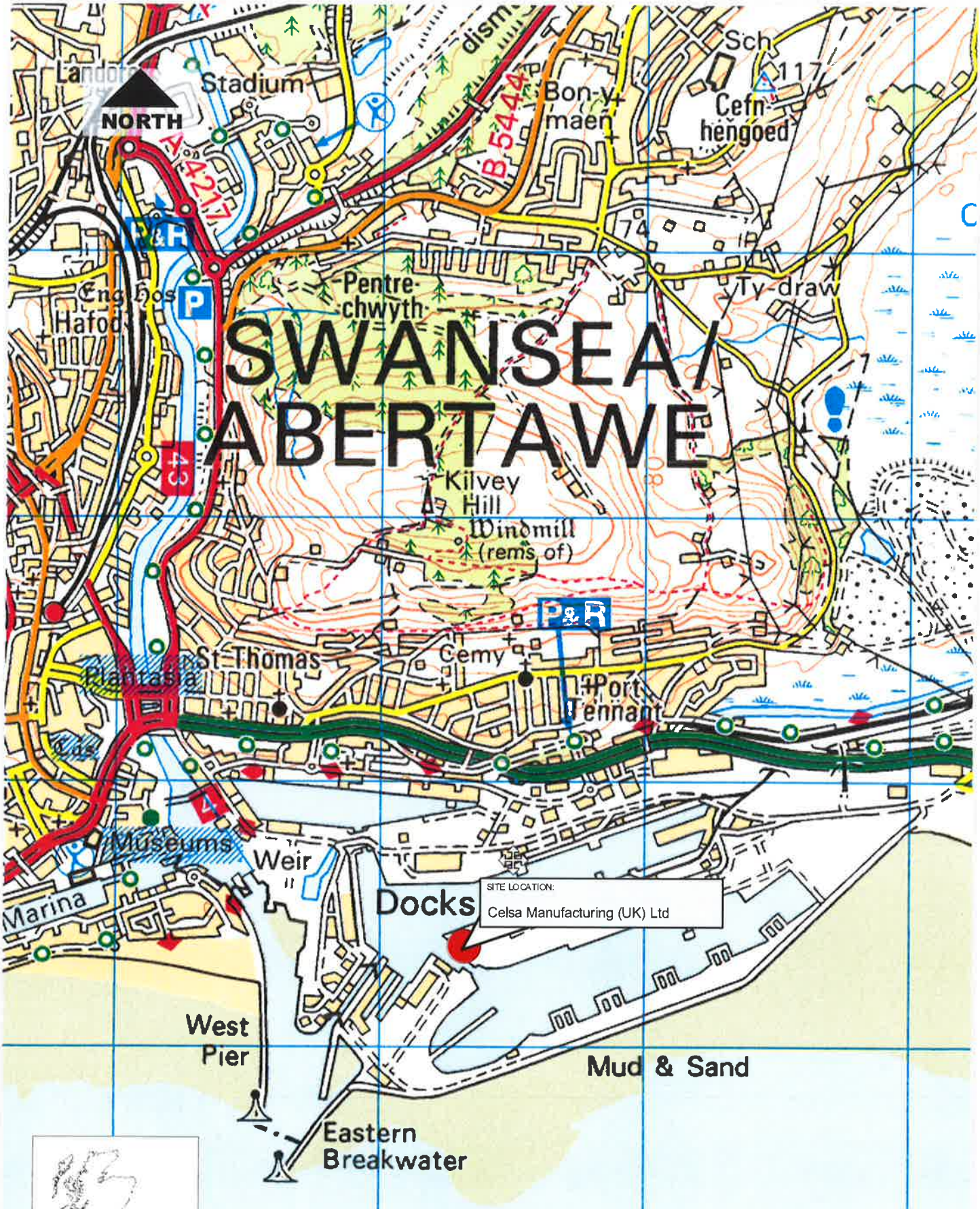
All stated risks are deemed acceptable (post mitigation).

3 https://www.gov.uk/government/collections/risk-assessments-for-specific-activities-environmental-permits

Annex A: Figures and Site Plans

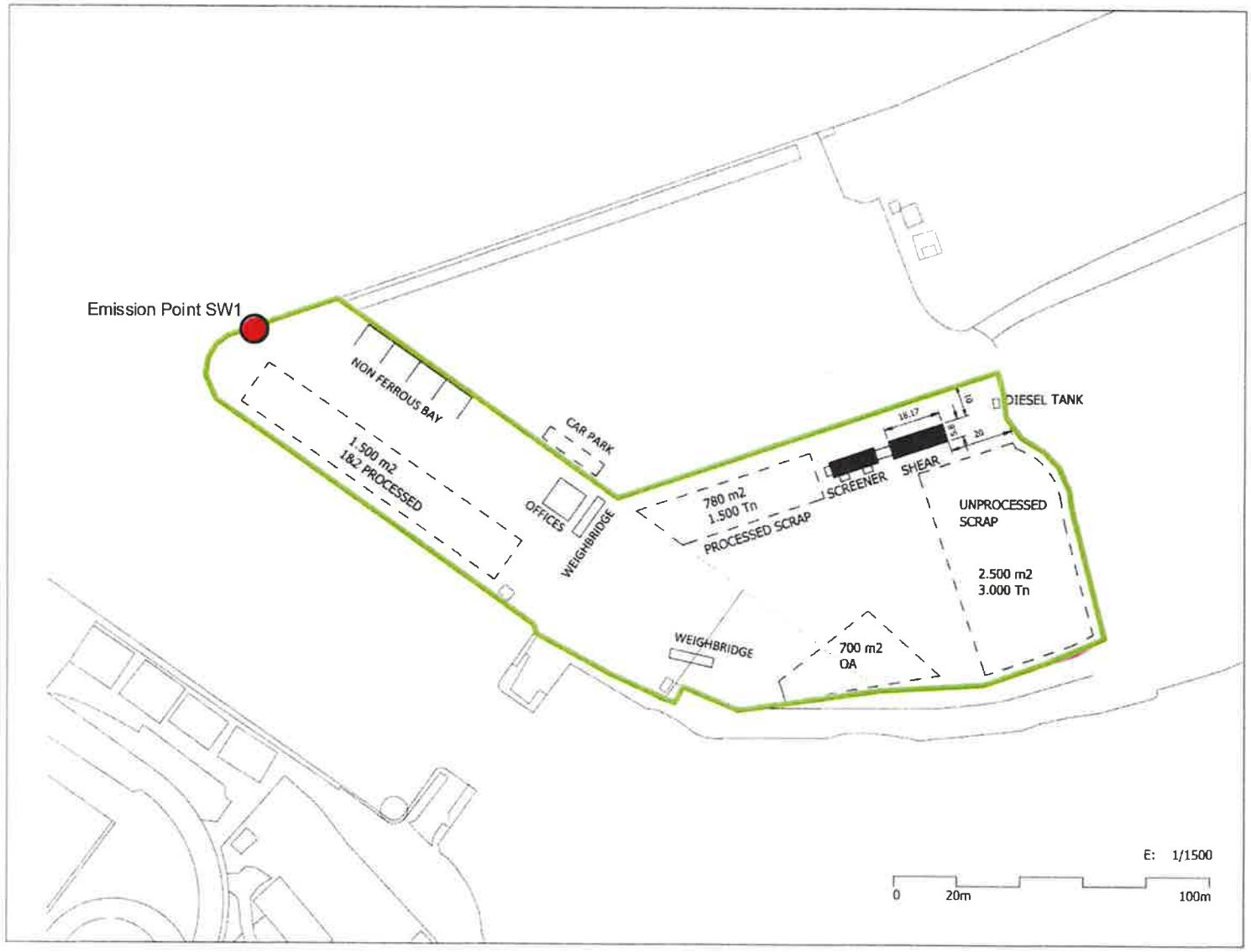
Annex B: Site Procedures and Plans

Annex C: Environmental Risk Assessment



TITLE:	JOB REFERENCE:	REVISIONS:		
Figure A1. Site Location	019-1691	No.	Date	Description
		00	17/04/19	Final for report
	DATE:	-	-/-/-	-
	April 17, 2019	-	-/-/-	-
CLIENT:		-	-/-/-	-
Celsa Manufacturing (UK) Ltd	SCALE: 1:50,000	DRAWN BY: MJS	CHECKED BY: SPR	

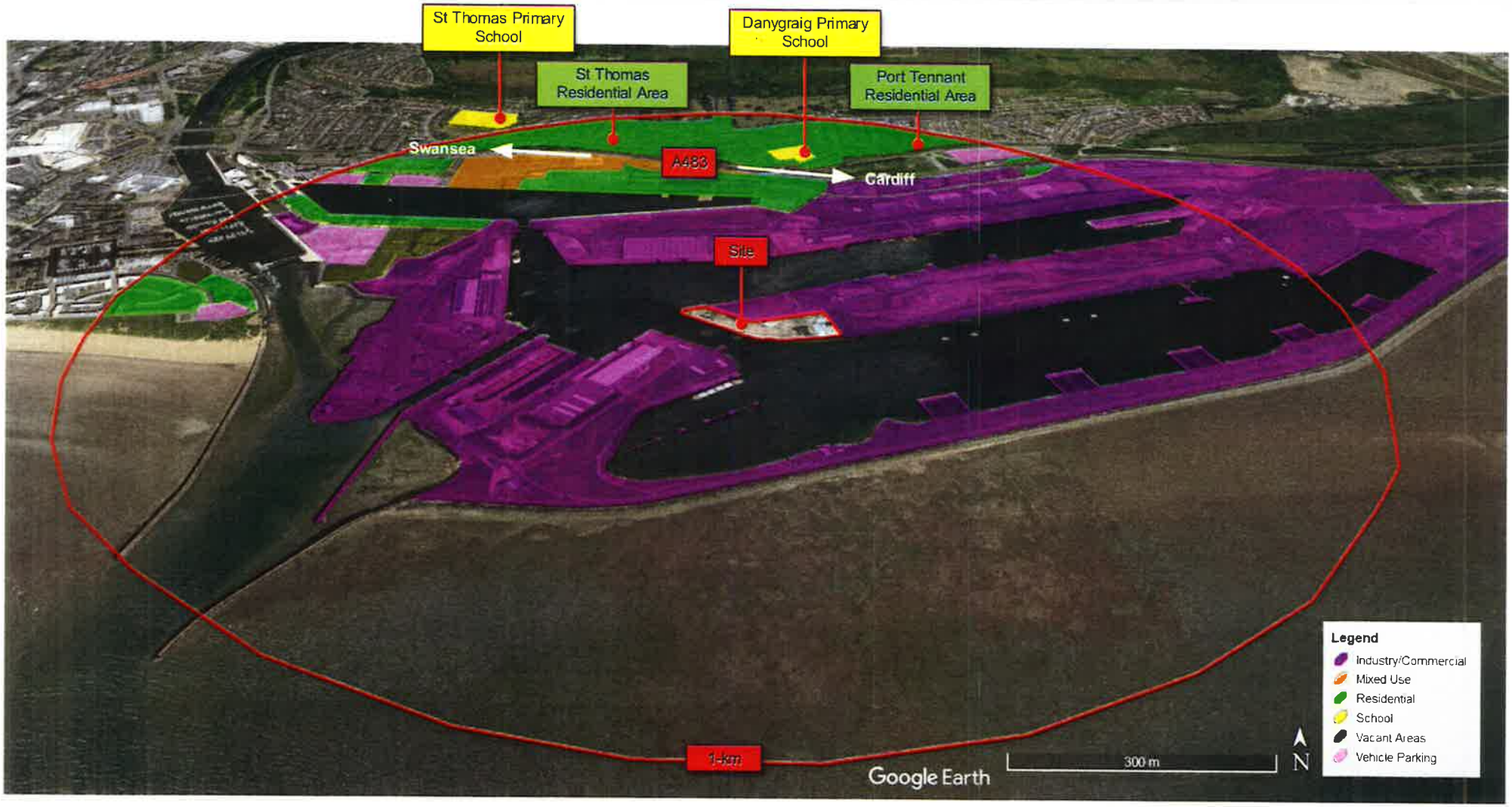
EAME



Source: Celsa Manufacturing (UK) Ltd plan, Ref. Swansea_EBROTONS_text-A4.pdf (April, 2019)

Permit boundary (EPR/AB3891FT)

TITLE: **Figure A2.** Revised Permit Boundary and Site Layout	JOB REFERENCE: 019-1691	REVISIONS: No. 00 / Date. 17/04/19 / Description. Final for report	EAME
	DATE: April 17, 2019		
CLIENT: Celsa Manufacturing (UK) Ltd	SCALE: As stated	DRAWN BY: MJS	CHECKED BY: SPR



Hospitals
No hospitals within 1-km of the Site. The closest is Westfa Day Hospital 2.6-km west.

Nursing homes
No nursing homes within 1-km of the Site. The closest is Heathfield Lodge 2.3-km north northeast.

Schools
One school within 1-km of the Site. Danygraig Primary School is 740 metres north. St Thomas Primary School is just over 1-km north.

Residential areas
Multiple residential areas associated with the St Thomas and Port Tennant areas.

Places of work
Multiple business located within 1-km of the Site.

Transport networks
Internal road network associated with Port of Swansea leading to A483. Please refer to 017-1586 Celsa Scrap Yard Transport Statement REV00.

TITLE:	JOB REFERENCE:	REVISIONS:		
Figure A3. Environmental Receptors (within 1-km of the Site)	019-1691	No. / Date / Description		
		00	20/03/19	Final for report
	DATE: March 20, 2019	-	-/-/-	-
		-	-/-/-	-
		-	-/-/-	-
CLIENT: Celsa Manufacturing (UK) Ltd	SCALE: As stated	DRAWN BY: MJS	CHECKED BY: SPR	EAME

Environmental Risk Assessment

Facility: Waste Operation (Bespoke - Tier 3) - Celsa Manufacturing (UK) Ltd, Metals Recycling Site

Location: Swansea Docks, Lockhead, Kings Dock, Swansea, SA1 1QR

Location of environmentally sensitive sites (m) Cors Crymlyn/Crymlyn Bog SSSI (within 2-km)

Risk assessment carried out by: Earth & Marine Environmental Consultants Ltd

Date: March 2019

Probability of exposure (likelihood of the receptors being exposed to the hazard)

HIGH
MEDIUM
LOW
VERY LOW

Severity (Consequences)

The consequences of a hazard being realised may be actual or potential harm. This will include be on a high/medium/low/very low score using attributes and scaling to consider 'harm'.

Magnitude of the risk - is determined by combining the probability with the magnitude of the potential consequences

HIGH
MEDIUM
LOW
VERY LOW

Control measures (Risk management involves breaking or limiting the source-pathway-receptor linkage to reduce risk)

Data and information				Significance Assessment				Action and Residual Risks	
Source	Pathway	Receptor	Potential Harm	Probability of exposure	Consequence	Magnitude of risk	Justification for magnitude	Control Measures	Residual risk
Releases of particulate matter (dusts) during handling and processing (shearing and cutting)	Air transport then inhalation.	Local human population	Harm to human health (respiratory irritation and illness).	LOW	MEDIUM	MEDIUM	Permitted waste types do not include dusts, powders or loose fibres. Other adjacent landuses are Port based or related to waste treatment. The closest residential receptors are located approximately 500 metres north of the Site on the northern side of the Prince of Wales Dock.	Good housekeeping driven by regular site inspections. Road sweeper employed as required. Daily visual inspections at all areas of the site will be carried out by site personnel. In the event that significant visual dust is observed at the permit boundary of the site, action will be taken to either stop the activity and/or suppress the dust.	LOW

Data and information				Significance Assessment				Action and Residual Risks	
Source	**Pathway**	**Receptor**	**Potential Harm**	**Probability of exposure**	**Consequence**	**Magnitude of risk**	**Justification for magnitude**	**Control Measures**	**Residual risk**
Releases of particulate matter (dusts) during handling and processing (shearing and cutting)	Air transport then deposition	Local human population	Nuisance (e.g. dust on cars, clothing etc.)	LOW	MEDIUM	MEDIUM	Permitted waste types do not include dusts, powders or loose fibres. Other adjacent landuses are Port based or related to waste treatment. The closest residential receptors are located approximately 500 metres north of the Site on the northern side of the Prince of Wales Dock.	Good housekeeping driven by regular site inspections. Road sweeper employed as required. Daily visual inspections at all areas of the site will be carried out by site personnel. In the event that significant visual dust is observed at the permit boundary of the site, action will be taken to either stop the activity and/or suppress the dust.	LOW
Litter	Air transport then deposition	Local human population, surrounding water features (dock) and wildlife.	Nuisance, loss of amenity and harm to animal health	LOW	MEDIUM	MEDIUM	Potential for wind driven moveable elements within the incoming waste streams is minimal.	Good housekeeping driven by regular site inspections. Internal and external boundary routines to identify and collect any wind blown litter derived from site activities.	VERY LOW
Waste, litter and mud on local roads (derived from internal Port road system).	Vehicles entering and leaving site.	Local human population	Nuisance, loss of amenity, road traffic accidents.	LOW	MEDIUM	MEDIUM	Vehicles entering the site will enter from the public highway through the Port of Swansea. The internal road system is an impermeable surface but large puddles have been identified between the entrance and the Site. The Site itself is composed of imperable surface and no source of mud has been identified.	Good housekeeping driven by regular site inspections. Internal and external boundary routines to identify and collect any wind blown litter derived from site activities. Road sweeper employed as required.	LOW
Odour	Air transport then inhalation.	Local human population	Nuisance, loss of amenity.	LOW	LOW	LOW	Local residents often sensitive to odour, however permitted waste types have low odour potential.	Good housekeeping combined with strict waste acceptance procedures would be used to identify putrescible waste within the incoming waste streams (considered unlikely). Where non-compliant material is identified it would be separated and contained.	VERY LOW
Noise and vibration	Noise through the air and vibration through the ground.	Local human population	Nuisance, loss of amenity, loss of sleep.	LOW	MEDIUM	MEDIUM	Local residents could be sensitive to noise and vibration derived from the Site activities. The closest residential receptors are located approximately 500 metres north of the Site on the northern side of the Prince of Wales Dock. There are various other noise and vibration sources between the Site and the closest residential receptors.	Where applicable, wheeled plant is used to reduce ground vibration. Periods of unloading noise and vibration will be for short duration. Boundary noise monitoring will be undertaken where required. Operating hours restricted.	LOW

Data and information				Significance Assessment				Action and Residual Risks	
Source	**Pathway**	**Receptor**	**Potential Harm**	**Probability of exposure**	**Consequence**	**Magnitude of risk**	**Justification for magnitude**	**Control Measures**	**Residual risk**
Scavenging animals and scavenging birds	Air transport and over land	Local human population	Harm to human health - from waste carried off site and faeces. Nuisance and loss of amenity.	LOW	LOW	LOW	Permitted wastes unlikely to attract scavenging animals and birds but may become nesting/breeding sites (although this is considered unlikely given the size of the site).	Good housekeeping driven by regular site inspections. Internal and external boundary routines to identify and collect any waste types that may attract birds to the Site.	VERY LOW
Pests (e.g. flies)	Air transport and over land	Local human population	Harm to human health, nuisance, loss of amenity	LOW	LOW	LOW	Permitted wastes unlikely to attract pests.	Good housekeeping driven by regular site inspections. Internal and external boundary routines to identify and collect any waste types that may attract pests to the Site.	VERY LOW
Flooding of site	Flood waters	Local human population and local environment	If waste is washed off site it may contaminate the adjacent Dock.	LOW	MEDIUM	MEDIUM	According to the NRW Flood Risk mapping, the Site lies within an area of Low chance of flooding (rivers and seas). Low means that each year, this area has a chance of flooding of between 1 in 1000 (0.1%) and 1 in 100 (1%). The Site is not at risk of flooding due to surface water and there is no reservoir flood risk.	Planned preventative management of the separator (weekly inspection) and servicing (6 monthly maintenance). Hazardous substances are stored within secondary containment and sealed drainage areas to reduce the loss of containment risk. If surface water flooding did happen site activities would cease and the NRW would be informed.	LOW
All on-site hazards: wastes; machinery and vehicles.	Direct physical contact	Local human population gaining unauthorised access to the waste operation	Bodily injury	LOW	HIGH	MEDIUM	Site security measures at these facilities to prevent theft. There is security on entry to the Port of Swansea (operated by ABP) and there will be security on entry to the Site (controlled by Celsa). The entire Site is surrounded by 2.4 m high pallisade fencing.	All activities shall be managed and operated in accordance with the stated management system (this includes site security measures to prevent unauthorised access).	LOW

Data and information				Significance Assessment				Action and Residual Risks	
Source	Pathway	Receptor	Potential Harm	Probability of exposure	Consequence	Magnitude of risk	Justification for magnitude	Control Measures	Residual risk
Arson and / or vandalism causing the release of polluting materials to air (smoke or fumes), water or land.	Air transport of smoke. Spillages and contaminated firewater by direct run-off from site and via surface water drains and ditches.	Local human population and local environment.	Respiratory irritation, illness and nuisance to local population. Injury to staff, firefighters or arsonists/vandals. Pollution of water or land.	LOW	HIGH	MEDIUM	Site security measures at these facilities to prevent theft. There is security on entry to the Port of Swansea (operated by ABP) and there will be security on entry to the Site (controlled by Celsa). The entire Site is surrounded by 2.4 m high pallisade fencing. Permanent CCTV is to be provided.	All activities shall be managed and operated in accordance with the stated management system (this includes site security measures to prevent unauthorised access). Spillage procedures will be established and maintained alongside suitable sufficient spillage response materials. All materials stored in accordance with the FPMP.	LOW
Accidental fire causing the release of polluting materials to air (smoke or fumes), water or land.	Air transport of smoke. Spillages and contaminated firewater by direct run-off from site and via surface water drains and ditches.	Local human population and local environment	Respiratory irritation, illness and nuisance to local population. Injury to staff or firefighters. Pollution of water or land.	LOW	HIGH	MEDIUM	Risk of accidental combustion of waste is low. Permitted activities do not include the burning of waste.	All activities shall be managed and operated in accordance with the stated management system. A Site-specific Fire Prevention & Mitigation Plan (FPMP) has been established and maintained. Spillage procedures will be established and maintained alongside suitable sufficient spillage response materials. All materials stored in accordance with the FPMP.	LOW
Spillage of liquids, leachate from waste, contaminated rainwater run-off from waste e.g. containing suspended solids.	Direct run-off from site across ground surface, via surface water drains (separator) etc.	All surface waters close to the site (Swansea Docks).	Acute effects: oxygen depletion, fish kill and algal blooms.	LOW	HIGH	MEDIUM	All permitted waste types are non hazardous solids so only a low magnitude risk is estimated. There is potential for contaminated rainwater run-off from wastes stored outside especially during heavy rain.	All liquids shall be provided with secondary containment. Run-off from the slab is engineered to drain through the Class 1 full retention separator (NSF200). With a nominal flow rate 200 litres/second the Class 1 separators is designed to achieve a discharge concentration of less than 5 mg/litre of oil. It has a silt capacity of 20,000 litres and a oil storage capacity of 2,000 litres.	LOW

Data and information				Significance Assessment				Action and Residual Risks	
Source	Pathway	Receptor	Potential Harm	Probability of exposure	Consequence	Magnitude of risk	Justification for magnitude	Control Measures	Residual risk
Spillage of liquids, leachate from waste, contaminated rainwater run-off from waste e.g. containing suspended solids.	As above. Indirect run-off via the soil layer.	All surface waters close to the site (Swansea Docks).	Chronic effects: deterioration of water quality.	LOW	HIGH	MEDIUM	All permitted waste types are non hazardous solids so only a low magnitude risk is estimated. There is potential for contaminated rainwater run-off from wastes stored outside especially during heavy rain.	All liquids shall be provided with secondary containment. Run-off from the slab is engineered to drain through the Class 1 full retention separator (NSF200). With a nominal flow rate 200 litres/second the Class 1 separators is designed to achieve a discharge concentration of less than 5 mg/litre of oil. It has a silt capacity of 20,000 litres and a oil storage capacity of 2,000 litres.	LOW
Spillage of liquids, leachate from waste, contaminated rainwater run-off from waste e.g. containing suspended solids.	Direct run-off from site across ground surface, via surface water drains, ditches etc. then abstraction.	Abstraction (or use) of surface water downstream of facility (for agricultural, fish farming or potable use).	Acute effects, closure of abstraction intakes.	LOW	HIGH	MEDIUM	All permitted waste types are non hazardous solids so only a low magnitude risk is estimated. There is potential for contaminated rainwater run-off from wastes stored outside especially during heavy rain.	All liquids shall be provided with secondary containment. Run-off from the slab is engineered to drain through the Class 1 full retention separator (NSF200). With a nominal flow rate 200 litres/second the Class 1 separators is designed to achieve a discharge concentration of less than 5 mg/litre of oil. It has a silt capacity of 20,000 litres and a oil storage capacity of 2,000 litres.	LOW
Spillage of liquids, leachate from waste, contaminated rainwater run-off from waste e.g. containing suspended solids.	Transport through soil/groundwater then extraction at borehole.	Groundwater	Chronic effects: contamination of groundwater, requiring treatment of water or closure of borehole.	LOW	MEDIUM	MEDIUM	There is a potential for contaminated rainwater run-off or leakage from permitted waste types.	All liquids shall be provided with secondary containment. The entire Site is constructed of good quality impermeable surface. There are no pathways to the groundwater.	LOW

Data and information				Significance Assessment				Action and Residual Risks	
Source	**Pathway**	**Receptor**	**Potential Harm**	**Probability of exposure**	**Consequence**	**Magnitude of risk**	**Justification for magnitude**	**Control Measures**	**Residual risk**
Contaminated waters used for recreational purposes	Direct contact or ingestion	Local human population	Harm to human health - skin damage or gastro-intestinal illness.	LOW	MEDIUM	**MEDIUM**	Unlikely to occur, but might restrict recreational use.	All liquids shall be provided with secondary containment. Run-off from the slab is engineered to drain through the Class 1 full retention separator (NSF200). With a nominal flow rate 200 litres/second the Class 1 separators is designed to achieve a discharge concentration of less than 5 mg/litre of oil. It has a silt capacity of 20,000 litres and a oil storage capacity of 2,000 litres.	**LOW**
Any	Any	Protected sites - European sites and SSSIs	Harm to protected site through toxic contamination, nutrient enrichment, smothering, disturbance, predation etc.	**VERY LOW**	**VERY LOW**	**LOW**	Waste operations may cause harm to and deterioration of nature conservation sites. There are protected sites within 1-km. The closest site is Cors Crymlyn/Crymlyn Bog SSSI.	No emissions to air from the processes is anticipated. No pathway to impact the stated SSSI has been identified.	**VERY LOW**
Serious Fire	Air transport then inhalation or deposition. Direct run off of fire water across site to surface waters.	Local human population and all surface waters close to and downstream of site.	Nuisance, harm to human health, loss of amenity, deterioration of water quality	LOW	HIGH	**MEDIUM**	Risk of accidental combustion of waste is low. Permitted activities do not include the burning of waste.	All activities shall be managed and operated in accordance with the stated management system. A Site-specific Fire Prevention & Mitigation Plan (FPMP) has been established and maintained. Spillage procedures will be established and maintained alongside suitable sufficient spillage [illegible] materials.	**LOW**
Serious Fire	Direct run off of fire water across site to surface waters.	All surface waters close to and downstream of site.	Loss of amenity, deterioration of water quality	LOW	HIGH	**MEDIUM**	Risk of accidental combustion of waste is low. Permitted activities do not include the burning of waste.	All activities shall be managed and operated in accordance with the stated management system. A Site-specific Fire Prevention & Mitigation Plan (FPMP) has been established and maintained. Spillage procedures will be established and maintained alongside suitable sufficient spillage response materials.	**LOW**

Opra Spreadsheet
for Waste Facilities

Version:	NRW v1	Release Date:	01-Apr-15

Permit No:	PAN-002062	Site Name:	Celsa Swansea Scrap Yard
Date:	30/11/2017	Operator:	Celsa Manufacturing (UK) Ltd

Attribute	Bands	Points
Complexity(s):	C	35
Emissions:	C	15
Location:	C	3
Operator Performance:	A	2
	Total:	55

Fees and Charges	
Application Fee	£9,405
Normal Variation	£7,645
Full Surrender	£6,875
Part Surrender	£6,875
Subsistence	See Charge Tables

Compliance Rating	

Subsistence Multiplier **100%**

Reference Sheet

Complexity Attribute

Site Type: A20 **Complexity Band:** C

2nd Site Type: ... **2nd Band:**

Complexity Bands are based on a lookup table (see References tab)

More than one Complexity (Site Type) is required only in circumstances where the permit in question covers a landfill activity **and** a treating/keeping activity. In all other circumstances only one site type should be entered. Where more than one site type applies, the one carrying the highest relevant complexity band is used.

Emissions Attribute (Waste Input)

Waste Type	Annual Tonnage	Emission Threshold	Emission Index
Inert		1000	
Non Hazardous (Non Bio)	120,000	750	160
Non Hazardous (Bio)		500	
Hazardous		250	
		Total:	160

Band: C

Emission Bands are based on total index: <10=A, <100=B, <1000=C, <10000=D, >=10000=E

Location Attribute

Question	*Answer*	*Points*	*Question*	*Answer*	*Points*
Proximity to Human Occupation:	50m-250m	3	Direct run-offs:	Yes - With interceptors	1
Assessment under wildlife, countryside or habitats legislation:	CRoW	2	Air Quality Management Zone:	No	
Groundwater/Aquifers:	Yes - Outside GPZ	1	Flood Plain:	No	
Sensitivity of surface water:	Grade 1 or 2	3	**Total Points:**	10	**Band:** C

Location Bands are based on total points: 0-4=A, 5-8=B, 9-12=C, 13-18=D, >18=E

Complexity Band (Activity) Risk Level: **MEDIUM**

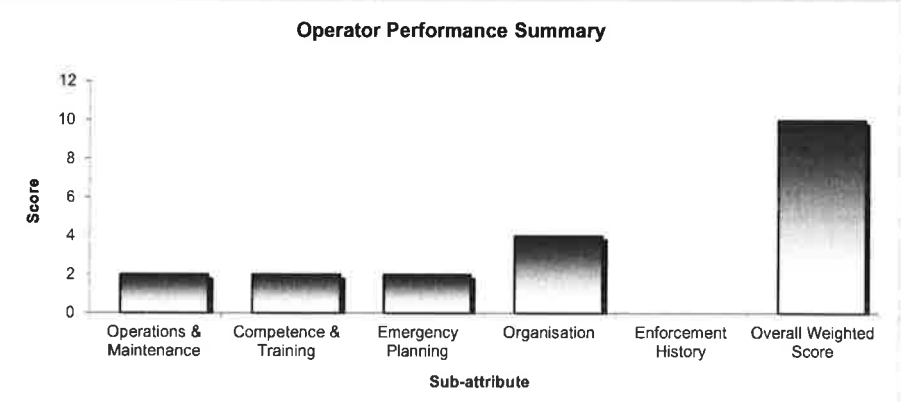
Operations & Maintenance			
1 Do you have documented operating procedures for operations that may have an adverse impact on the environment?	Yes	4	
2 Is there a defined procedure for identifying, reviewing and prioritising items of plant for which a preventative maintenance regime is appropriate?	Yes	2	
		0	
4 Do you have a preventative maintenance programme for items of plant whose failure could lead to impact on the environment?	Yes	2	Max = 12
5 Does the preventative maintenance programme include regular checks and formal inspections of infrastructure items such as tanks, pipework, retaining walls, bunds and ducts?	Yes	2	Weight = 20%
6 Are the reports, results and recommendations arising from your own audits made available to senior management on a regular basis?	Yes	2	Weighted Score
Operations and Maintenance Total		12	2.0

Competence and Training - 20%			
1 Has a training needs assessment been carried out which: ☐ Identifies all posts for which specific environmental awareness training is required; and ☐ Identifies the scope and level to which such training is to be given?	Yes	3	
2 Are training systems in place for all relevant staff that cover the following factors:			
☐ the regulatory requirements associated with the Permit as they affect their roles and responsibilities;	Yes	2	
☐ likely potential environmental impacts which may be caused by plant under their control. This should cover both normal and abnormal circumstances;	Yes	2	
☐ reporting procedures to inform supervisors or managers of deviations from permit conditions;	Yes	3	
☐ procedures to be used by supervisors or managers for the reporting of deviations from permit conditions to the regulator	Yes	2	
☐ prevention of accidental emissions and action to be taken when accidental emissions occur?	Yes	2	Max = 17
3 Do you assess the potential environmental risks posed by the work of contractors and provide instructions to contractors about protecting the environment while working on site?	Yes	3	Weight = 20%
4 If there are industry standards for training in this sector (e.g. WAMITAB) do you apply them? (If no industry standards please leave blank)	Yes	0	Weighted Score
Competence Training Total		17	2.0

Emergency planning - 20%			
1 Is there an accident plan that complies with guidance covering the following aspects of foreseeable scenarios: likelihood, consequences,actions to prevent, action to take in the event it occurs?	Yes	6	
2 Has the plan identified areas where improvement is needed?	Yes	2	
3 Where improvement has been identified, does the plan include an implementation programme with acceptable timescales to the regulator? If not, points will be deducted.	Yes	0	
4 Do you have written procedures for handling, investigating, communicating and reporting actual or potential non compliance with operating procedures or emission limits?	Yes	4	
		0	Max = 12
		0	Weight = 20%
		0	Weighted Score
Emergency planning Total		12	2.0

	Organisation - 40%			
	Internal/External Environment Management Systems: **Answer either Question 1 or Question 2** **NB: If your externally audited system is ISO9001 but you also have an internal environmental management system, you may be able to obtain a better score by providing answers to question 2**			
1	Do you have a certified Environmental Management System, subject to external audit, which covers the activities allowed by this permit? If so which one?	EMAS	20	
	Sub Total		**20**	
2	**If you do not operate an externally audited environmental management system but have an internal one, assess your system against the criteria below:**			
2.1	Has your company adopted an environmental policy and programme which :			
	☐ includes a commitment to continual improvement and prevention of pollution?	**Yes**	3	
	☐ includes a commitment to comply with relevant legislation, and with other requirements that the organisation subscribes to?	**Yes**	3	
	☐ identifies, sets, monitors and reviews environmental objectives, independently of the permit?	**Yes**	3	
2.2	Do you have an environmental policy and programme which is subject to audit by your company?	**Yes**	2	
2.3	Are there annual reports on environmental performance, objectives and targets, future planned improvements and/or do you participate in local community liaison meetings?	**Yes**	1	**Max = 12**
3	Does your company produce a public environmental statement? You may score in this box for ISO 14001 and industry systems but not for EMAS as this is a requirement for EMAS.	**No**	0	**Weight = 40%**
4	Within the past 5 years have you failed to meet an improvement condition set by the regulator in a Permit or Variation by the due date, without prior agreement? (minus 2 for each failure). ADD NUMBER OF FAILURES NOT Y OR N	**0**	0	**Weighted Score**
	Organisational Total:		**20.0**	**4.0**

	Enforcement History (0 to -40% weighting)			
	Please enter the number of times relevant enforcement actions have been pursued in connection with your site. Note: the timescales over which action remains relevant depends on the type of enforcement action and is contained in the questions below			
1	Number of Enforcement, Improvement, Works, Compliance or Restoration Notices issued in the past year by the Environment Agency under any legislation, by the Health and Safety Executive relevant to the COMAH Regulations or by local authorities under Part I of the Environmental Protection Act 1990 or relevant notice or Abatement Notices issued by local authorities or magistrates courts under Part III of the Environmental Protection Act 1990 (in all cases, other than any overturned on appeal by the Operator)	**0**		
2	Number of Formal Cautions, Enforcement Undertakings or Fixed Monetary Penalties issued by the Environment Agency in respect of offences under relevant legislation in the last 3 years.	**0**		
3	Number of Prohibition, Stop, Suspension or Revocation Notices issued by the Environment Agency under any legislation, by the HSE relevant to the COMAH Regulations or by local authorities under Part I of the Environmental Protection Act 1990, (other than any overturned on appeal by the Operator) in the last 3 years	**0**		
4	Number of Convictions on prosecutions brought by the regulator under any legislation, by the HSE relevant to the COMAH regulations or by local authorities (in respect of offences under Parts I or III of the Environmental Protection Act 1990) in last 5 years (or 10 years where a term of imprisonment was imposed on the Operator) (other than any overturned on appeal). Or number of any Variable Monetary Penalties issued.	**0**		**Max = -40** **Weight = 40%** **Weighted Score**
			0	**0.0**
	Overall Operator Performance Score:			**10.00**
	Band E= less than 2 D= 2 to 3.99, C= 4 to 5.99, B= 6 to 7.99 , A= 8 to 11		**BAND=**	**A**



Operator Performance Summary	
Operations & Maintenance	2.0
Competence & Training	2.0
Emergency Planning	2.0
Organisation	4.0
Enforcement History	0.0
Overall Weighted Score	###

Complexity Bands	
...	
A01	EEE
A01-Closed	B
A02	EE
A02-Closed	B
A03	E
A03-Closed	B
A04	DD
A04-Closed	B
A04-Dredgings	B
A05	C
A05-Closed	A
A06	C
A06-Closed	A
A07	C
A07-Closed	A
A08	C
A08-Closed	A
A09	D
A10	B
A11	C
A12	D
A13 (non-haz)	B
A13 (haz)	C
A14	B
A15	A
A16 (non-haz)	A
A16a (haz)	D
A17	E
A18	D
A19	C
A19a	B
A20	C
A21	E
A22	C
A23	C
A24	B
A25	B
A26	n/a
A27	A
A29	B
L05	C
L05-Closed	A

2015/16

Charge Multipliers						
App	£171	Nor Var	£139	Full Surr	£125	Part Surr
Subs	NA					

Converting Bands to Opra Score

Band	A	B	C	D
Complexity	4	10	35	50
Emissions	3	7	15	30
Location	1	2	3	5
Op Perf	2	4	7	10
Compliance Rating	0.95	1	1.1	1.25
Band	A	B	C	D

EMS	Points
No	0
EMAS	20
ISO14001	15
Other Accredited	12
ISO 9001	8

£125

E	DD	EE	EEE
65	100	130	195
40			
7			
14			
1.5	3		
E	F		

50 YEARS | CELSA GROUP

EAME
Earth & Marine Environmental Consultants

Environmental Permit Application - Variation
Celsa Manufacturing (UK) Limited

Non-Technical Summary
Permit No. EPR/AB3891FT

019-1691 | April 2019| Revision 00

Introduction

Celsa Manufacturing (UK) Ltd operates a scrap metal yard within the Port of Swansea. This document is the non-technical summary that forms part of the application (variation) package in relation to the following proposed changes:

- change in operating hours;
- revised scrap metal storage capacity to enable efficient movement of material via ship;
- extension of the current permit boundary;
- movement of current weighbridge and addition of a second weighbridge;
- movement of the offices and employee car park;
- revised site layout including orientation and location of unprocessed and processed scrap metal stockpiles;
- installation of a new small scrap metal screening plant (pre-conveyor magnetic separator);
- replacement of the existing shear with new unit with higher processing throughput; and
- installation of new larger (self-bunded) above ground diesel storage tank.

The site accepts will accept a range of ferrous and non-ferrous metals for on-site processing but no hazardous waste is permitted. This is an excluded waste category.

The activities are still controlled by a formal environmental management systems (EMS) that is compliant and certified to ISO14001:2015 and the Eco-Management and Audit Scheme (EMAS).

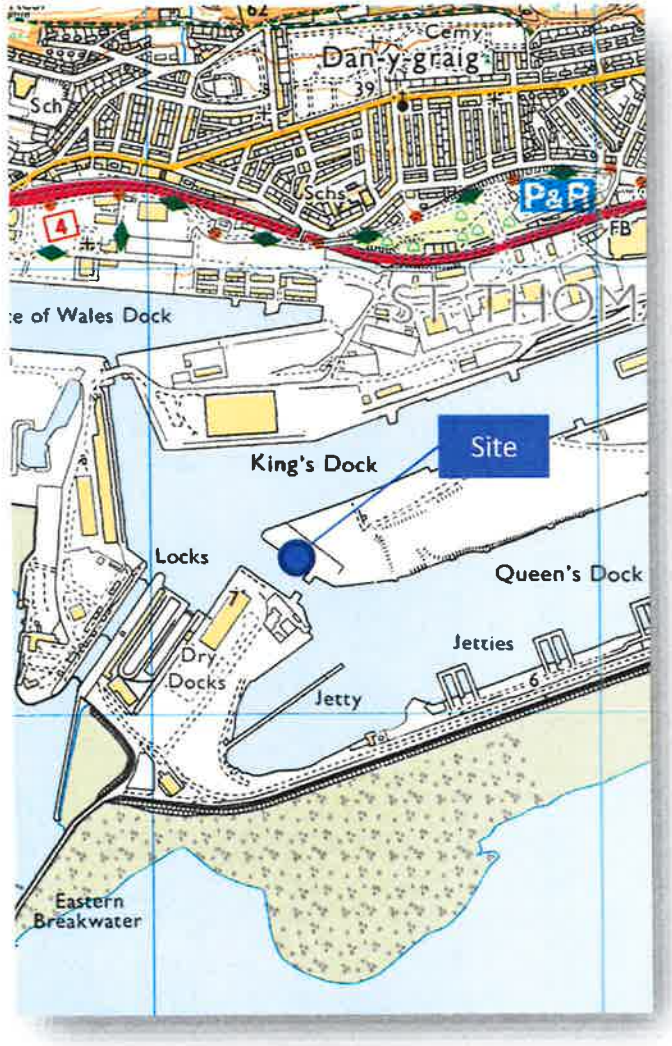


Figure 1: *Site Location - Ordnance Survey Map Extract (1:50,000)*
Ordnance Survey 1: 25,000 scale map with the permission of the Controller of Her Majesty's Stationery Office, Crown Copyright Earth and Marine Environmental Consultants Ltd, Licence No. 100050755

Site Photographs

Photograph 2: *View north across proposed extension area*

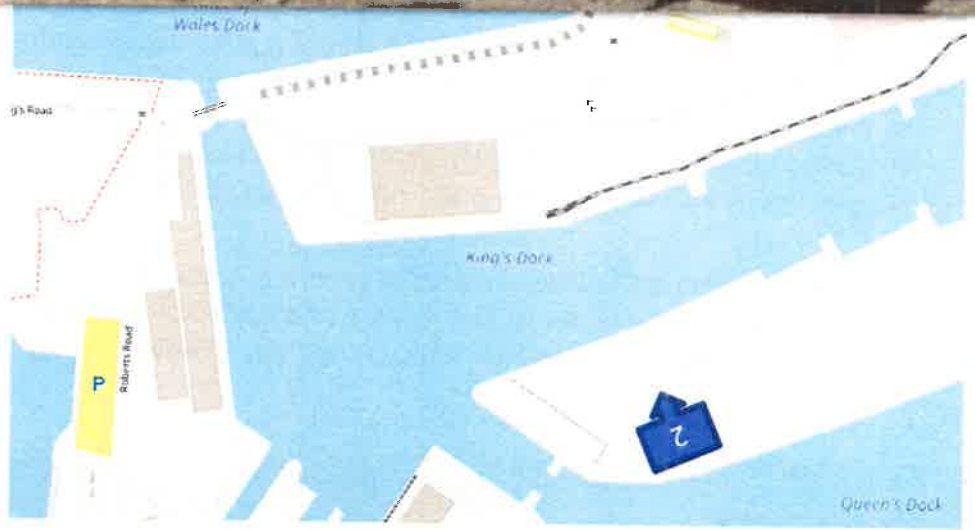


Figure 2: *Location of photographs*
© OpenStreetMap contributors

Surrounding Environment

The Site is located approximately 1-km east of Swansea City centre at National Grid Reference (NGR) SS 67337 92377. The Site is located within Swansea docks (Port of Swansea) that are owned and operated by Associated British Ports (ABP).

The following current activities have been identified surrounding the Site:

- NORTH – King's Dock beyond which are further operations associated with the Port of Swansea. Residential properties are located near the edge of the Prince of Wales Dock (500 metres north).
- EAST – Operations associated with the Port of Swansea. Northeast is King's Dock and southeast is Queen's Dock.
- SOUTH – Queen's Dock beyond which are a series of disused oil jetties and the breakwater. Beyond the breakwater are mudflats and Swansea Bay.
- WEST – Passage between King's Dock and Queen's Dock (Scherzer Passage) beyond which are further operations associated with the Port of Swansea. Residential properties (associated with Swansea Marina) are located approximately 730 metres west.

Surface waters – The Site is surrounded by surface water on two sides (i.e. King's Dock to the north and Queen's Dock to the south). Since approximately 2011/12, Thomas Shellfish Limited has been using Queen's Dock to farm rope-grown mussels. The Queen's Dock in Swansea, where they farm, was certified as an Aquaculture Production Site by CEFAS (Centre for Environment, Fisheries and Aquaculture Sciences) in 2011.

Groundwater – The South Wales Middle Coal Measures Formation (bedrock) is classified as a Secondary A Aquifer (formerly known as a minor aquifer). The superficial shallow deposits are uncategorised.

Flood Risk – According to the NRW Flood Risk mapping, the site lies within an area of Low chance of flooding (rivers and seas). Low means that each year, this area has a chance of flooding of between 1 in 1000 (0.1%) and 1 in 100 (1%). The site is not at risk of flooding due to surface water and there is no reservoir flood risk.

Residential Areas – The closest residential properties are located 500 metres north on the northern side of the Prince of Wales Dock.

Historic buildings, listed buildings and archaeological sites - The Historic Wales website was queried to identify any listed buildings or ancient monuments. The closest is Swansea Castle 1.77 km north northwest of the Site.

Conservation and habitats protected areas and areas of scientific interest – NRW data was queried to locate Sites of Special Scientific Interest (SSSI), Special Protection Areas (SPAs) Special Areas of Conservation (SACs), Ramsar Sites, National Nature Reserves, Areas of Outstanding Natural Beauty (AONB), National Parks and Local Nature Reserves in the immediate and wider surrounds of the Site. The closest protected site (approximately 1.3-km east) is Crymlyn Bog/Cors Crymlyn SSSI (Ref. 33WWP) and SAC (Ref. UK0012885).

Emissions to Air, Water and Land

Emissions to Air

There will be no point source emissions to air from the activities. Fugitive emissions will occur due to the use of diesel vehicles, plant and the handling and shearing of scrap metal. Particulates (dust) could be emitted to atmosphere during the unloading and loading of scrap metal within vehicles and the loading and unloading of the box shear although the levels are expected to be low (insignificant).

Emissions to Surface Water

The entire site is composed of good quality engineered hardstanding that is suitable for the storage, handling and treatment of scrap metal. Rainfall that falls on to the ground will be directed to a Class 1 full retention separator prior to discharge into King's Dock (*Figure 2*). The separator will remove and store both particulate (silt) and oil. The separator is oversized so it will be able to easily cope with the run-off from the permitted area. A full retention separator treats all water passing through it i.e. there is no by-pass facility. An alarm system is fitted to detect the presence of oil within the separator.

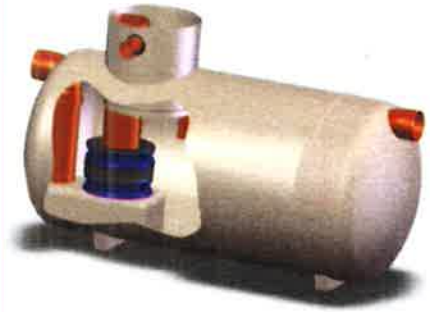


Figure 2: *Full retention separator*
https://www.kingspanenviro.com/klargester/full-rentention-separators#product-details-container

Emissions to Sewer

There are no point source emissions to foul sewer. Domestic sewerage, from the on-site facilities (welfare cabins), is to be collected and stored within a septic tank. The tank will be emptied (by road tanker) as and when required.

Emissions to Groundwater

There will be no emissions to groundwater either directly or indirectly.

Odour

Based upon the nature of the proposed operations, the wastes being stored, handled and treated (only scrap metal not general waste) and their location (in relation to sensitive receptors) no significant odour issues are anticipated.

Noise and Vibration

The Site is located central with the Port of Swansea and is surrounded by industrial and commercial operations including other waste processing activities. The closest sensitive noise receptors are located 500 metres north of the Site beyond a series of other industrial and commercial activities. Based upon the nature of the proposed operations and their location (in relation to sensitive receptors) no significant noise or vibration issues are anticipated (i.e. the installation represents a very low risk)

Environmental Risk Assessment Summary

This section provides a tabulated overview of the key environmental risks associated with the site (including the impact of the proposed variation).

The overall environmental impact of the proposed development is considered to be beneficial given the economic and jobs boost it will provide. The majority of the potentially negative environmental impacts can be removed through the application of suitable and sufficient engineering and management controls.

Table 1: *Environmental Risk Assessment Summary*

Environmental Attribute	Risk (before mitigation)	Risk (after mitigation)
Releases of particulate matter (dusts) during handling and processing.	Medium	Low
Release of litter	Medium	Very Low
Waste, litter and mud on local roads (derived from internal Port road system).	Medium	Low
Odour	Low	Very Low
Noise and vibration	Medium	Low
Scavenging animals and scavenging birds + pests	Low	Very Low
Flooding of site	Medium	Low
All on-site (safety) hazards: wastes; machinery and vehicles.	Medium	Low
Arson and / or vandalism causing the release of polluting materials to air (smoke or fumes), water or land.	Medium	Low
Spillage of liquids, leachate from waste, contaminated rainwater run-off from waste e.g. containing suspended solids.	Medium	Low
Contaminated waters used for recreational purposes	Medium	Low
All sources – leading to harm to protected site through toxic contamination, nutrient enrichment, smothering, disturbance, predation etc.	Low	Very Low
Serious Fire	Medium	Low

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Earth & Marine Environmental Consultants

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Tel: +44 (0)800 130 3408 | enquiry@eame.co.uk | www.eame.co.uk

Companies House
for the record

287

Change in situation or address of Registered Office

Please complete in typescript, or in bold black capitals.
CHWP000

Company Number 04577881

Company Name in full CELSA MANUFACTURING (UK) LIMITED

New situation of registered office

NOTE:

The change in the situation of the registered office does not take effect until the Registrar has registered this notice.

For 14 days beginning with the date that a change of registered office is registered, a person may validly serve any document on the company at its previous registered office.

PO Box numbers only are not acceptable.

Address BUILDING 58
EAST MOORS ROAD
Post town CARDIFF
County / Region
Postcode CF24 5NN

Signed [signature] **Date** 30/4/03

† Please delete as appropriate.

† a director / secretary / administrator / administrative receiver / liquidator / receiver manager / receiver

Please give the name, address, telephone number and, if available, a DX number and Exchange of the person Companies House should contact if there is any query.

STUART DRURY

Tel 02920 488563

DX number DX exchange

#AQAOKKLD# 0551
A42 02/05/03
COMPANIES HOUSE

When you have completed and signed the form please send it to the Registrar of Companies at:
Companies House, Crown Way, Cardiff, CF14 3UZ **DX 33050 Cardiff**
for companies registered in England and Wales
or
Companies House, 37 Castle Terrace, Edinburgh, EH1 2EB
for companies registered in Scotland **DX 235 Edinburgh**

FILE COPY

CERTIFICATE OF INCORPORATION

ON CHANGE OF NAME

Company No. 4577881

The Registrar of Companies for England and Wales hereby certifies that

CELSA STEEL (UK) LIMITED

having by special resolution changed its name, is now incorporated

under the name of

CELSA MANUFACTURING (UK) LIMITED

Given at Companies House, Cardiff, the 28th April 2003

C04577881R

THE OFFICIAL SEAL OF THE REGISTRAR OF COMPANIES

Companies House

for the record

HC006B

CCC 168/20

COMPANY NUMBER 4577881

THE COMPANIES ACTS 1985 TO 1989

PRIVATE COMPANY LIMITED BY SHARES

SPECIAL RESOLUTION OF CELSA STEEL (UK) LIMITED

Dated this the 14 Day of April 2003

At an extraordinary general meeting of the above named company, duly convened and held on 14 April 2003, the following resolution was duly passed as a special resolution.

viz:

RESOLUTION

That with the sanction of the Department of Trade the name of the company be and is hereby changed to Celsa Manufacturing (UK) Limited.

.....
Chairman

.....
Dated: 14 April 2003

Natural Resources Wales

26 March 2019

To whom it may concern,

Richard Lewis is appointed as the company Environmental Manager and is therefore the relevant person to apply for permit applications on behalf of Celsa Manufacturing (UK) Ltd.

Yours sincerely,

Luis Sanz

Managing Director

Site Condition Report (with Baseline Reference Data)
Celsa Manufacturing (UK) Ltd
Swansea Docks, Lockhead, Kings Dock, Swansea, SA1 1QR
Permit No. EPR/AB3891FT

On behalf of:
Celsa Manufacturing (UK) Ltd

Project Reference:
019-1691

Revision:
REV 00

Date:
April 2019

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Document Control Record				
Revision	**Date**	**Author(s)**	**Authorised by**	**Reason for Change**
00	17/04/19	DCW	MJS	First draft issue to Client

Contents

Abbreviations

BGS	British Geological Survey
EA	Environment Agency
EAME	Earth & Marine Environmental Consultants Ltd
EPR	Environmental Permit
GNSS	Global Navigation Satellite System
GPR	Ground Penetrating Radar
NGR	National Grid Reference
NRW	Natural Resources Wales
NVZ	Nitrate Vulnerable Zone
SCR	Site Condition Report
SPZ	Source Protection Zone
WFD	Water Framework Directive

1 Introduction

1.1 Background

This document has been prepared by Celsa Manufacturing (UK) Ltd (Celsa) and its environmental consultant Earth & Marine Environmental Consultants Ltd (EAME) in support of a bespoke (waste operation) environmental permit variation application as required under Regulation 20 of the *Environmental Permitting (England and Wales) Regulations 2016* in relation to activities proposed to be undertaken at Celsa Swansea Scrap Yard, Graigola Wharf, King's Dock, Swansea Docks, Swansea, SA1 8QT, Wales (Permit No. EPR/AB3891FT). The site has been permitted since 27/04/18.

An environmental permit application is required where an operator carries out certain prescribed activities, namely installations that undertake Schedule 1 activities, a waste operation or a mobile plant (carrying out either one of the Schedule 1 activity or a waste operation).

The waste processing and storage activities meet the description of an installation as defined as a Tier 3 bespoke permit for a mixed metal recycling activity[1]:

- R13 Storage of waste pending any of the operations numbered R1 to R12; and
- R4 Recycling/reclamation of metals and metal compounds

A full description of the proposed activities is provided in *Section 4*.

The Site Condition Report (SCR) has been produced in accordance with the Natural Resources Wales (NRW) Guidance Document H5 Site condition report - guidance and templates (Version 5, October 2014) *i.e.* provision of Sections 1 to 3 as outlined in the SCR Template.

The remainder of this document outlines the requirements requested by the NRW to progress the permit variation application.

1 Environment Agency (2015). Regulatory Guidance Series, No. RGN 2 Understanding the meaning of regulated facility, Version 3.1. May 2015.

2 Site Details

The site details are outlined below.

Name of Applicant	Cela Manufacturing (UK) Ltd
Activity Address	Celsa Swansea Scrap Yard, Graigola Wharf, King's Dock, Swansea Docks, Swansea, SA1 8QT, Wales
National Grid Reference (NGR)	Grid Reference (6 figure) – SS 67337 92377 51.614539, -3.9174521
Document reference and dates for Site Condition Report at permit application and surrender	**Original Application (017-1574):** 017-1574 Celsa Swansea Scrap Yard SCR REV00 **Variation 2019 (019-1691):** 019-1691 Celsa Swansea Scrap Yard - SCR REV00
Document references for site plans (including location and boundaries)	**Annex A: Site Plans** Figure A1: Site Location (Ordnance Survey 1:25,000) Figure A2: Installation Boundary (outline in green)

3 Condition of Land at Permit Issue

3.1 Environmental Setting

Desk-based research of the local geology, hydrogeology, hydrology and ecology was carried out to establish the potential for migration of contamination onto or away from the site, and to assess the surface water and groundwater sensitivity of the surrounding area. Information was obtained from several sources, namely:

- examination of published geological maps produced by the British Geological Survey (BGS), inspection of the BGS Geology of Britain Viewer and associated borehole logs[2];
- review of Envirocheck Landmark report (Ref. 138065595_1_1);
- an examination of the EA's on-line aquifer classification[3];
- review of NRW and Joint Nature Conservation Committee (JNCC) on-line environmental data; and
- a review of other online web and other publicly available information.

3.1.1 Geology

According to the BGS viewer and Geological Survey of England and Wales 1:50,000 geological map series (Sheet 247 Swansea, Solid and Drift, 2011), the site is directly underlain by the following deposits:

- **Made Ground** – The key to the BGS map states '*mainly colliery and mineral smelting spoil, also some road and railway embankments*'. Given the Site is within the docks it is highly likely that the excavated dock material (possibly blown Sand or beach and tidal deposits – undifferentiated – sand silt and clay) would have been used to backfill the newly constructed dock walls.
- **Superficial deposits** – Underlying the infilled docks are likely to be either Marine Beach Deposits (Sand) or blown Sand.

2 http://maps.bgs.ac.uk/geologyviewer
3 http://maps.Environment-agency.gov.uk/wiyby/wiybyController

- **Bedrock deposits** – South Wales Middle Coal Measures Formation – Mudstone with coal seams, seatearths and thin sandstone beds up to 240m thick in the Swansea area.

3.1.2 Hydrogeology

The aquifer classification system was updated on 1st April 2010 which provided new aquifer designations to replace the old system of aquifer classifications, such as Major, Minor and Non-Aquifer. This new system is in line with the EA's Groundwater Protection Policy (GP3) and the Water Framework Directive (WFD) and is based on BGS mapping. From a review of the NRW on-line maps, the underlying deposits are classified as:

- **Bedrock Deposits** – The South Wales Middle Coal Measures Formation is classified as a Secondary A Aquifer. These are defined as '*permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers*'.

The groundwater vulnerability has been categorised by the EA/NRW as '*Soils of High Leaching Potential (U) - Soil information for restored mineral workings and urban areas is based on fewer observations than elsewhere. A worst-case vulnerability classification (H) assumed, until proved otherwise*'.

The EA/NRW have defined Groundwater Source Protection Zones (SPZs) for 2,000 groundwater sources such as wells, boreholes and springs used for public drinking water supply. These zones are designated to protect the location from the risk of contamination from any activities that might cause pollution in the area, *i.e.* the closer the activity, the greater the risk. The SPZs show three main zones; an inner, an outer and the total catchment with a fourth zone of special interest, which the EA/NRW occasionally apply, to a groundwater source. The Site is not within an SPZ.

There are currently no groundwater abstractions associate with the site or within a 2-km radius.

3.1.3 Hydrology

The Site is located within the Port of Swansea (*Figure 3.1*) and is surrounded by surface water on two sides (*i.e.* King's Dock to the north and Queen's Dock to the south).

Figure 3.1: *Surrounding surface water features*

Google Earth Imaging with the permission of Google – Licensed to Earth & Marine Environmental Consultants Ltd.

There are no surface water abstraction licences associated with the Site, and only one abstraction within 500 metres of the Site:

- 109m south (J W Aquaculture Ltd), surface water abstraction from Scherzer Passage, Licence No. 22/69/1/0120, used for aquaculture: fish farm/cress pond throughflow.

Since approximately 2011/12, Thomas Shellfish Limited has been using Queen's Dock to farm rope-grown mussels. The Queen's Dock in Swansea, where they farm, was certified as an Aquaculture Production Site by CEFAS (Centre for Environment, Fisheries and Aquaculture Sciences) in 2011.

3.1.4 Flood Risk

According to the NRW Flood Risk mapping, the Site lies within an area of Low chance of flooding (rivers and seas). Low means that each year, this area has a chance of flooding of between 1 in 1,000 (0.1%) and 1 in 100 (1%) (*Figure 3.2*).

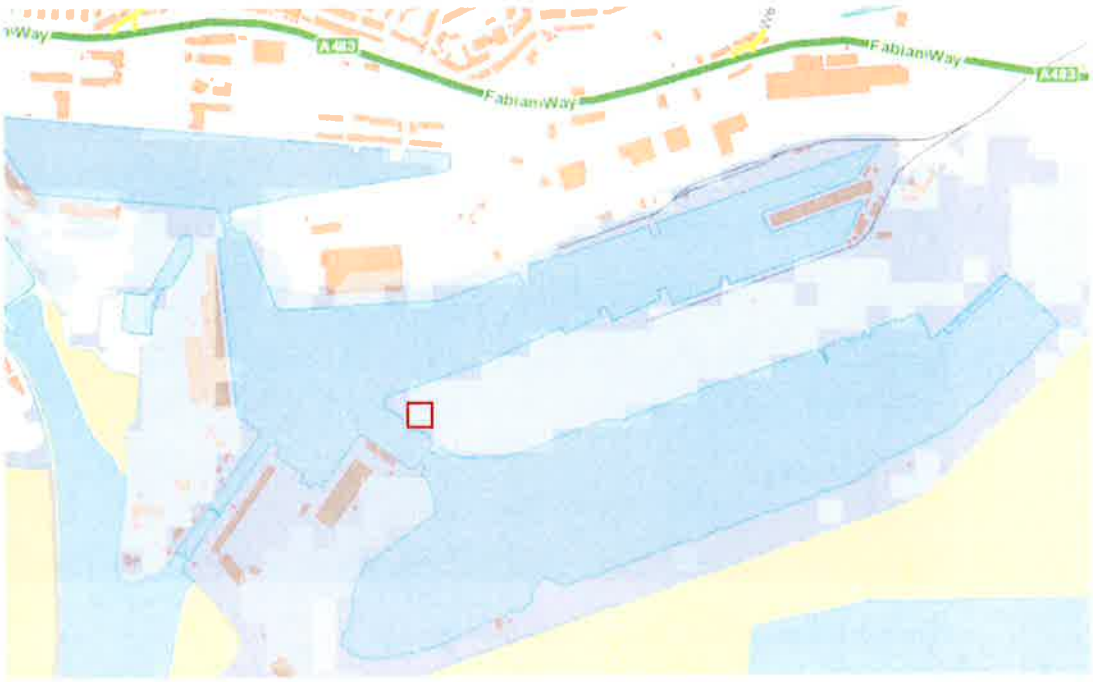


Figure 3.2: *Risk of flooding from Rivers and Sea*

https://maps.cyfoethnaturiolcymru.gov.uk/

The Site is not at risk of flooding due to surface water and there is no reservoir flood risk.

3.1.5 Ecology

NRW data[4] was queried to locate Sites of Special Scientific Interest (SSSI), Special Protection Areas (SPAs) Special Areas of Conservation (SACs), Ramsar Sites, National Nature Reserves, Areas of Outstanding Natural Beauty (AONB), National Parks and Local Nature Reserves in the immediate and wider surrounds of the Site. There are no such designated sites within a 1-km

4 http://lle.gov.wales/

radius of the site. The closest protected site (approximately 1.3-km east) is Crymlyn Bog/Cors Crymlyn SSSI (Ref. 33WWP) and SAC (Ref. UK0012885).

3.1.6 Residential Receptors

The closest residential properties are located 500 metres north on the northern side of the Prince of Wales Dock.

3.1.7 Protected Buildings

The Historic Wales website[5] and NRW data[4] was queried to identify any listed buildings or ancient monuments within 1-km. None were identified. The closest is Swansea Castle 1.77 km north northwest of the Site.

3.2 Pollution History

3.2.1 Pollution incidents that may have affected land

There are no recorded pollution incidents or Substantiated Pollution Incidents associated with the Site. There are, however, nine incidents (within 500 metres) related to various dock related activities (including releases from boats and ships).

There are no records of any current or historic landfill sites associated with the Site or within a 1-km search radius. However, the Site is identified as potentially infilled land. The Site (Dock) was created during the creation of the Port of Swansea.

According to publicly available information the Site is not and has not been a licensed waste treatment, transfer and/or disposal site. There are five active or expired licences within 300m of the Site:

- 32m east (EPS Alternative Fuels Limited), King's Dock, Ref. AB3194FB, Expired 22nd March 2017.
- 236m east (Stenor Environmental Limited), Household, Commercial and Industrial Transfer Stations, Graigola Wharf, Ref. JP3198FJ & 34290, Effective 1st March 2017 and 26th June 2007.

5 http://historicwales.gov.uk/

- 266m west (Caerleon Treatments Limited), Hazardous waste transfer station, King's Dock, Ref. 34006, Expired 30th March 1978.
- 291m north (Glass Tech Recycling Limited), Materials recycling facility, King's Dock, Ref. 900140, Issued 4th August 2015.

3.2.2 Historical land-uses and associated contaminants

The earliest available map (1879) indicated that the Site was undeveloped and was depicted as part of the foreshore of Swansea Bay. By the late 1910s, the Site was part of the Port of Swansea and part of the Graigola Merthyr Patent Fuel Works that extended to the east of the Site. The key stages in the development of the Site are:

- **Port of Swansea** – Work began on the King's Dock (north of the Site) in 1905 to meet the growing demand of Tinplate exports from the local area. Construction was complete by 1909. At the same time, the King's Dock was being built, a breakwater was constructed further south of the King's dock which enclosed a large body of water covering 61 ha. This body of water was opened in 1920 as the Queen's Dock after oil handling facilities were built to handle imports for the nearby BP oil refinery at Llandarcy and petrochemical plant at Baglan Bay. Usage of the Queen's Dock reached its peak in the 1950s when oil imports and exports reached around 8 million tonnes per year. Since the closure of the oil plants at Baglan Bay and Llandarcy, the Queen's Dock was rendered obsolete as an oil handling facility (*Figure 2.5*).
- **Graigola Merthyr Patent Fuel Works** – According to the Archives Network Wales[6], Clydach Merthyr Colliery was situated near Clydach in the Swansea Valley. The mine was opened in 1863 by the Graigola Merthyr Company, a member of the Monmouthshire and South Wales Coal Owners' Association. The Graigola seam produced high quality coal which had a very low percentage of ash. This feature meant that 'Graigola Merthyr' patent coal fuel was used by many important foreign rail and steamship companies. The plant was closed in 1958[7]. The plant was a maker of 'patent fuel', or 'preserved coal' - a mixture usually comprising small coal (preferable steam coal) mixed with distilled coal tar pitch and compressed into blocks via moulds (briquetting). According to published information the classic pitch bound block briquette made in South Wales consisted of blending coals. That is steam coal with bituminous, so that the block would tend to cake as it burned and

6 http://anws.llgc.org.uk/
7 http://www.welshcoalmines.co.uk/forum/read.php?14,29193

minimised crumbling. A typical briquette would contain Bituminous coal - 25%, Steam coal – 45%, Dry Steam coal – 22% and Pitch – 8%.

- **Coal storage –** Available aerial photographs show that the Site was used for coal storage in 2002 and then again in 2005-2006. The area to the east continued to be used for coal storage until at least 2010/11.

- **Scrap metal storage –** According to the archive photographs from 2010-2011, the Site has previously been used for the storage of scrap metal. It is unclear whether processing of materials was undertaken on-site.

The following potentially contaminative activities have been identified as having taken place on-Site (*Table 3.1*).

Table 3.1: Potential On-site Contamination Sources

Land Use	Description	Potential Contaminants
In-filled docks Historic	Work began on the King's Dock (north of the Site) in 1905 to meet the growing demand of Tinplate exports from the local area. Construction was complete by 1909. The area is composed of infilled/reclaimed land.	Metals and Metalloids, Phenols, chlorides, sulphates, sulphides, Polycyclic Aromatic Hydrocarbons (PAHs), coal/coke, asbestos, cyanides *etc.*
Graigola Merthyr Patent Fuel Works Historic	The plant was located on-site between the late 19th century until the late 1950s. The plant was a maker of 'patent fuel', or 'preserved coal' - a mixture usually comprising small coal (preferable steam coal) mixed with distilled coal tar pitch and compressed into blocks via moulds (briquetting).	Ammoniacal liquors, coal tar, spent oxide, foul lime, metals, coal dust, PAHs, hydrocarbons *etc.*

Table 3.1: Potential On-site Contamination Sources		
Land Use	**Description**	**Potential Contaminants**
Railway Lines Historic	A review of the available historic maps shows the presence of railway lines across the Site associated with the Graigola Merthyr Patent Fuel Works.	Possible iron and steel wastes used as fill material. Atrazine and simazine herbicides used as herbicides, PCBs used in transformers. Diesel and other organic hydrocarbons associated with oils, fuel and grease. If ash was used as fill material this may have PAHs, phenols and sulphates associated with it. Asbestos from lagging.
Metal Waste Storage Historic	Storage of scrap metal.	Metals and metalloids, inorganics, organics, asbestos, radioactive components *etc.*
Coal Storage Historic	Storage of coal.	Metals and metalloids, inorganics, PAHs, pH, sulphate

The key stages in the Site's development are shown in *Figure 3.3*. The extended permit site boundary (post variation) is shown in red.

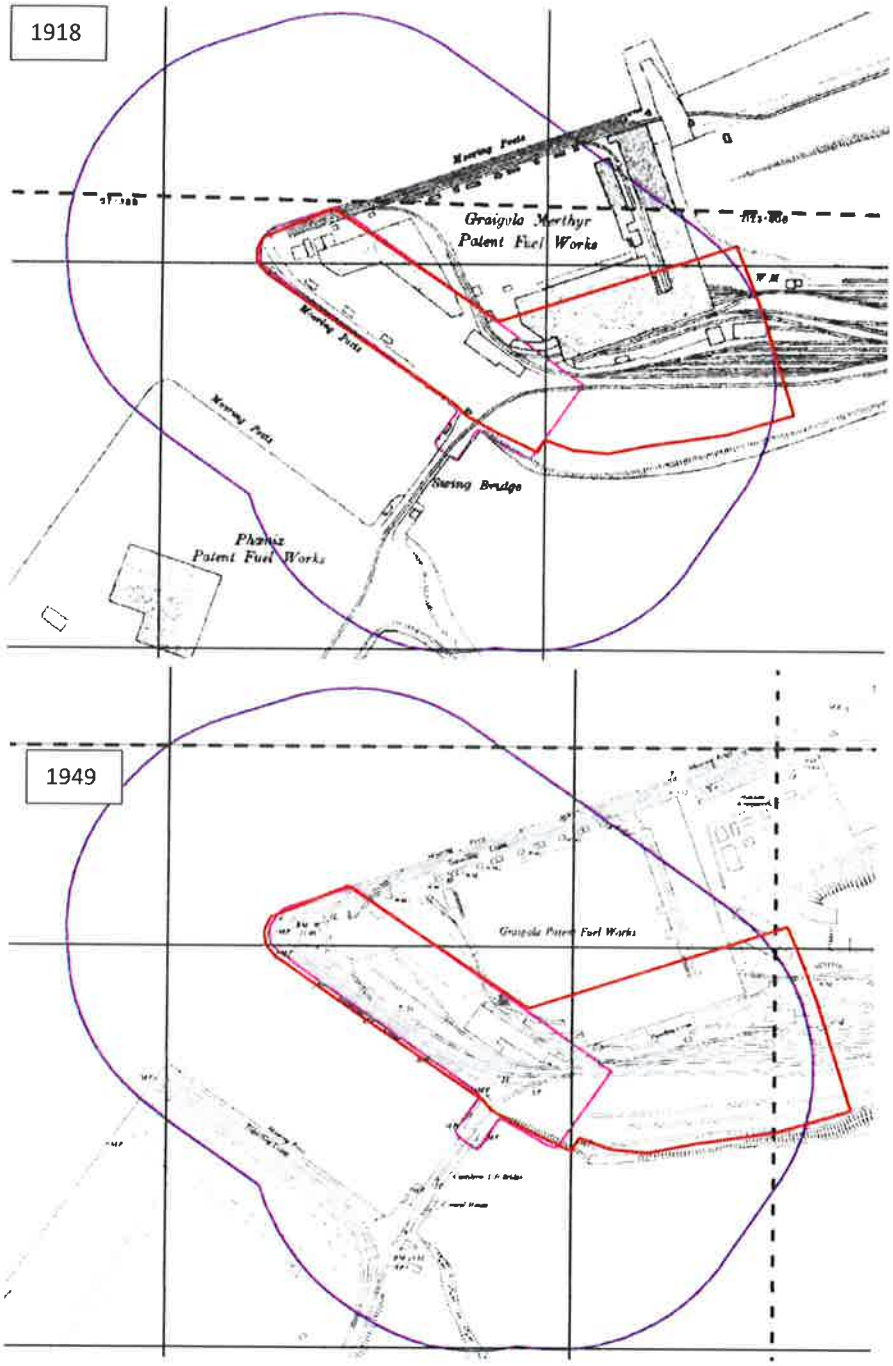


Figure 3.3: *Key stages in the Site Development*

Ordnance Survey 1:2,500 scale maps with the permission of The Controller of Her Majesty's Stationery Office, Crown Copyright Earth & Marine Environmental Consultants Ltd, Licence No. 100050755

A web-based search of the City and County of Swansea planning records was undertaken on 6th September 2017. No planning applications, appeals or enforcement records are associated with the Site (from 1st January 2000). However, there two applications were identified associated with the adjacent land area:

- 2009/0354 | Expansion of existing operations to create a waste reclamation and recycling centre (renewal of planning permission 2006/2728 granted 23rd April 2007) | Waste Reclamation and Recycling Centre, Graigola Wharf, Kings Dock, Swansea. Approved September 2009.
- 2006/2728 | Expansion of existing operations to create a waste reclamation and recycling centre | Waste Reclamation and Recycling Centre, Graigola Wharf, Kings Dock, Swansea. Approved April 2007.

3.2.3 Any visual/olfactory evidence of existing contamination

The Site is brownfield and is almost entirely hardstanding except for small areas of vegetation near to the southern, northern and eastern edges of the Site. No buildings are currently on-site.

3.2.4 Evidence of damage to pollution prevention measures

The fall on the hardstanding is designed to capture all drainage from across the Site within the Scherzer Passage drainage gulley before directing the run-off through a Class 1 full retention separator. The drainage is then discharged to King's Dock via a tidal flap **[Emission Point SW1]**.

Celsa will ensure that all waste processing and storage areas are suitably repaired prior to waste acceptance at the Site. The tertiary containment surfaces will be inspected and maintained throughout the life of the permit.

Current site conditions (within the current permitted area) are presented in *Photograph 3.1 - Photograph 3.4*. The condition of the proposed extension area is outlined within *Photograph 3.5*.

Photograph 3.1: *Scrap handling within current permitted area (March 2019)*

Photograph 3.2: *Scrap storage at edge of* Scherzer Passage drainage gulley *(March 2019)*

Photograph 3.3: *Scrap handling within the current permitted area (March 2019)*

Photograph 3.4: *Weighbridge and waste scanner within current area (March 2019)*

Photograph 3.5: *Tertiary containment surfaces (proposed extension area)*

A full topographic and structural survey of the current Site has been undertaken. The results are outlined in *Annex D*. A visual assessment of the proposed extension will be undertaken and recorded prior to occupation.

3.2.5 Evidence of historic contamination, for example historical site investigation, assessment, remediation and verification reports (where available)

Evidence of a previous intrusive investigation was identified during the Site inspection. Results from this investigation were not made available by the site owner (ABP).

3.2.6 Baseline soil and groundwater reference data

Please refer to *Section 4*.

4 Baseline Soil and Groundwater Data

4.1 Site Application – Baseline Reference Data

The soil and groundwater data presented below is provided as evidence of the baseline conditions at permit issue.

4.1.1 Scope of Works

A targeted intrusive investigation at the Site was undertaken on 6th March 2018 to assess the nature and extent of any existing contamination. The breakdown of the strategy to investigate and assess conditions can be summarised as follows:

- a non-intrusive utility search for the presence of Site services was carried out by obtaining service utility plans and the undertaking of a survey of the Site by an EAME approved service tracing specialist (RP Drilling Ltd);
- the drilling of ten (10) window sample locations to a maximum depth of 5.0 metres below ground level (bgl) by an EAME approved sub-contractor (Cook Ground Investigation Limited);
- the installation of 50mm diameter monitoring wells at four (4) locations to facilitate groundwater monitoring;
- positioning of all intrusive locations using a standalone Leica Global Positioning System (GPS)/Global Navigation Satellite System (GNSS);
- the logging, sampling and on-site screening of soil samples for Volatile Organic Compounds (VOCs) at regular intervals throughout the soil profile using a Photo Ionisation Detector (PID); and
- submission of selected soil and groundwater samples to a UKAS and MCERTS accredited independent laboratory (i2 Analytical Ltd) for the analysis of a range of contaminants, which are likely to be associated with the former/current activities and ground conditions on the Site.

The window sample locations are outlined in *Table 4.1* and *Figure 4.1*. *Figure 4.1* has been revised to show the amended permit boundary (post variation). As the original investigation was rather detailed (for such a small area) combined with the fact that the extended permit boundary has the same (or very similar) historic use no further ground information collection

is proposed *i.e.* it is proposed that the current data (baseline) is representative of the extended permit boundary area.

Figure 4.1: *Window Sample Locations (based on GPS/GNSS Survey)*

Google Earth Imaging with the permission of Google – Licensed to Earth & Marine Environmental Consultants Ltd.

Table 4.1: Window Sample Locations					
EAME Ref.	Easting	Northing	Longitude	Latitude	Elevation (m AOD)
WS01	267388.037	192321.378	-3.916691	51.614051	7.621
WS02	267356.107	192357.14	-3.917166	51.614367	7.017
WS03	267354.883	192375.039	-3.917202	51.614529	6.987
WS04	267334.63	192367.98	-3.917488	51.614452	6.886
WS05	267285.365	192397.049	-3.918206	51.61471	6.298
WS06	267319.083	192401.661	-3.917717	51.614754	6.529
WS07	267315.496	192370.187	-3.917763	51.614474	6.719
WS08	267359.177	192340.249	-3.917117	51.614215	6.753
WS09	267395.428	192342.573	-3.916598	51.614242	7.504
WS10	267295.981	192412.816	-3.918068	51.614847	6.265

4.1.2 Health and Safety

A detailed project specific Health and Safety Plan (HSP) was prepared in advance of the commencement of the investigatory works. The project specific HSP was approved by the Project Director and was provided to all on-site EAME employees. For the avoidance of doubt, EAME staff as a minimum adhere to relevant legislation and best practice, including the Health and Safety Executive Guidance Note HS(G) 47 "Avoiding Danger from Underground Services", and other relevant regulatory and legal requirements *e.g. Health & Safety at Work Act 1974 etc.*

Service tracing and clearance of all Window Sample locations was undertaken by RP Drilling Ltd. All areas were also scanned using Ground Penetrating Radar (GPR) before final sign-off.

4.1.3 Drilling

All drilling and window sample installations were undertaken by Cook Ground Investigation Limited using a small tracked rig (Global Geo Rig). Cook Ground Investigation Limited have over 15 years' experience whilst holding a Level 2 NVQ in land drilling and CSCS Skilled Person qualification.

The well installations were made using <1mm slotted well screen, 1-2mm washed and graded filter gravel and high-quality bentonite sealing materials. All materials were supplied by Cook Ground Investigation Limited. Drilling was undertaken on 6th March 2018.

4.1.4 Headspace Testing

All soil samples were tested by dynamic headspace analysis, for the presence of VOCs using a PID. Dynamic headspace analysis refers to the manual agitation (warming) of a sample to facilitate the volatilisation of organic compounds present in the sample into the headspace above which is then analysed using the PID. The PID screens for a wide range of volatile organic compounds including hydrocarbon compounds and certain chlorinated solvents but does not indicate a specific compound. The measurements obtained by the instrument in parts per million by volume (ppmv) provide a semi-quantitative indication of the concentration of hydrocarbon vapours.

The PID unit used was a MiniRae Lite ATEX supplied by Environmental Science & Technology Ltd (*Table 4.2*).

Table 4.2: PID Details

Criteria	Description
Instrument	MiniRae Lite ATEX
Supplied by	Environmental Science & Technology Ltd
Lamp	10.6 eV gas discharge lamp
Serial No.	595-002379
Results	Isobutylene (Cylinder LOT: GBH-248-100-12), (Span 100ppm), Bump test 99.8 ppm, zero performed using charcoal filter.
Calibration Date	4th March 2018
Certificate No.	10043

The results of the headspace testing are outlined in *Table 4.3*.

Table 4.3: Soil Headspace Testing Results

Ref.	Sample Depth	Visual and Olfactory Observations	PID Reading (ppmv)	Laboratory Analysis
WS01	0.5-0.9m	None	0.0	Suite B, ACM
WS01	1.5-1.9m	None	0.0	Suite B, SVOC, VOC
WS03	0.2-0.6m	None	0.0	Suite B
WS04	1.5-2.0m	None	0.0	Suite B, SOM, SVOC, VOC
WS04	3.5-4.0m	None	0.0	Suite B
WS05	1.0-1.4m	None	0.5	Suite B, SOM, SVOC, VOC
WS05	2.2-2.8m	None	0.4	Suite B
WS06	0.2-0.5m	None	0.0	Suite B, ACM
WS06	1.0-1.4m	None	0.0	Suite B
WS07	1.1-1.2m	None	0.0	Suite B
WS07	2.0-2.5m	None	0.4	Suite B, SVOC, VOC
WS08	0.2-0.4m	None	2.6	Suite B, ACM, SVOC, VOC
WS08	1.2-1.5m	None	0.1	Suite B
WS10	1.0-1.5m	None	0.4	Suite B, ACM
WS10	1.8-1.9m	None	0.7	Suite B, SVOC, VOC
WS10	2.5-3.0m	None	0.7	Suite B

Notes:

Suite B – Arsenic, Cadmium, Chromium, Lead, Mercury, Selenium, Copper, Nickel, Zinc, Vanadium, Beryllium, Water, Soluble Boron, Total Cyanide, Monohydric, Phenols, pH Value, TPH - CWG (C5-35), Aliphatic/Aromatic Split (with CWG banding - Aliphatic C5-6,>6-8,>8-10,>10-12,>12-16,>16-21,>21-35) (Aromatic - >C6-7,>7-8,>8-10,>C10-12,>12-16,>16-21,>21-35), Speciated PAHs (USEPA-16), Sulphate (water soluble).

VOC – Volatile Organic Compounds, SVOC – Semi-Volatile Organic Compounds, SOM – Soil Organic Matter, ASB – Asbestos

The peak reading of 2.6 ppmv does not indicate the presence of significant volatile compounds within the soil. No evidence of any hydrocarbon sheen(s) or olfactory evidence of contamination was noted during the drilling of any of the window sample locations.

4.1.5 Sample Integrity

All collected soil and groundwater samples were submitted to an MCERTS and UKAS (ISO 17025) accredited laboratory (i2 Analytical) for chemical analysis. Discussions were held with the laboratory prior to the commencement of any works to determine the quantity of sample required and the containers to be used.

All samples obtained were placed in the appropriate container for the analysis to be carried out and were immediately put into a temperature regulated cool box with frozen cool packs. All samples were given a unique reference number, dated and the information recorded on an appropriate Chain of Custody (CoC) form for dispatch with the samples to the appropriate laboratory.

4.1.6 Soil and Groundwater Analytical Strategy

The analytical strategy was designed by EAME to provide an assessment of the presence of a common range of potential contaminants likely to be associated with the previous uses of the Site. The analytical suites are outlined in *Table 4.4*.

Table 4.4: Analytical Strategy

Analytical Suite	Soils	Groundwater
EAME Suite B Arsenic, Cadmium, Chromium, Lead, Mercury, Selenium, Copper, Nickel, Zinc, Vanadium, Beryllium, Water Soluble Boron, Total Cyanide, Monohydric Phenols, pH Value, Total Petroleum Hydrocarbon TPH - CWG (C5-35) Aliphatic/Aromatic Split (with CWG banding - Aliphatic C5-6,>6-8,>8-10,>10-12,>12-16,>16-21,>21-35) (Aromatic - >C6-7,>7-8,>8-10,>C10-12,>12-16,>16-21,>21-35), Speciated Polycyclic Aromatic Hydrocarbon (PAHs) (USEPA-16), Sulphate (water soluble), benzene, toluene, ethylbenzene, and xylenes (BTEX) and Methyl tert-butyl ether (MTBE)	**16 samples** WS01 (0.5-0.9m) WS01 (1.5-1.9m) WS03 (0.2-0.6m) WS04 (1.5-2.0m) WS04 (3.5-4.0m) WS05 (1.0-1.4m) WS05 (2.2-2.8m) WS06 (0.2-0.5m) WS06 (1.0-1.4m) WS07 (1.1-1.2m) WS07 (2.0-2.5m) WS08 (0.2-0.4m) WS08 (1.2-1.5m) WS10 (1.0-1.5m) WS10 (1.8-1.9m) WS10 (2.5-3.0m)	**3 samples** WS04 WS05 WS06
Volatile Organic Compounds (VOCs) Standard i2 Analytical VOC suite. **Semi Volatile Organic Compounds (SVOCs)** Standard i2 Analytical SVOC suite.	**6 samples** WS01 (1.5-1.9m) WS04 (1.5-2.0m) WS05 (1.0-1.4m) WS07 (2.0-2.5m) WS08 (0.2-0.4m) WS10 (1.8-1.9m)	**3 samples** WS04 WS05 WS06
Asbestos (Screen and ID)	**4 samples** WS01 (0.5-0.9m) WS06 (0.2-0.5m) WS08 (0.2-0.4m) WS10 (1.0-1.5m)	N/A

Table 4.4: Analytical Strategy		
Analytical Suite	**Soils**	**Groundwater**
Soil Organic Matter	**2 sample** WS04 (1.5-2.0m) WS05 (1.0-1.4m)	N/A

4.1.7 Soil Chemical Data

The baseline soil conditions at the Site are outlined within *Annex F*.

4.1.8 Groundwater Chemical Data

The baseline groundwater conditions at the Site are outlined within *Annex G*.

5 Permitted Activities

5.1 Proposed Activity

The waste processing and storage activities meets the description of an installation as defined as a Tier 3 bespoke permit for a mixed metal recycling activity[8]:

- R13 Storage of waste pending any of the operations numbered R1 to R12; and
- R4 Recycling/reclamation of metals and metal compounds

5.1.1 Waste Streams

Waste streams are:

2	WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
02 01 10	waste metal
12	WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS
12 01	wastes from shaping and physical and mechanical surface treatment of metals and plastics
12 01 01	ferrous metal filings and turnings
12 01 03	non-ferrous metal filings and turnings
15	WASTE PACKAGING, ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01	packaging (including separately collected municipal packaging waste)
15 01 04	metallic packaging
16	WASTES NOT OTHERWISE SPECIFIED IN THE LIST

8 Environment Agency (2015). Regulatory Guidance Series, No. RGN 2 Understanding the meaning of regulated facility, Version 3.1. May 2015.

16 01	end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)
16 01 06	end-of-life vehicles, containing neither liquids nor other hazardous components
16 01 17	ferrous metal
16 01 18	non-ferrous metal
16 01 22	components not otherwise specified
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 04	metals (including their alloys)
17 04 01	copper, bronze, brass
17 04 02	aluminium
17 04 03	lead
17 04 04	zinc
17 04 05	iron and steel
17 04 06	tin
17 04 07	mixed metals
17 04 11	cables other than those mentioned in 17 04 10
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE
19 01	wastes from incineration or pyrolysis of waste
19 01 02	ferrous materials removed from bottom ash
19 10	wastes from shredding of metal-containing wastes
19 10 01	iron and steel waste

19 10 02	non-ferrous waste
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 02	ferrous metal
19 12 03	non-ferrous metal
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11 (consisting of metal containing wastes only)
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01	separately collected fractions (except 15 01)
20 01 40	Metals

No hazardous waste is accepted on to, processed or stored at the Site.

There are no directly associated activities.

5.1.2 Waste Volumes

The proposed waste volumes are outlined within *Table 5.1*.

Table 5.1: Proposed waste volumes	
Total Waste Input	120,000 tonnes per annum
Ferrous Recovery	112,800 tonnes per annum
Non-ferrous Recovery	3,600 tonnes per annum
Maximum Storage Capacity (at any time)	7,000 tonnes

5.2 Non-permitted activities undertaken

The Site has minor maintenance activities, welfare, sewage storage (cess pit), office facility and a staff car parking area. These are not to be included within the permitted installation.

5.3 Other requirements

Plans showing activity location and layout are provided in *Annex A*.

The facilities environmental risk assessment is outlined within the main technical document *Ref.* 019-1691 Celsa Swansea Scrap Yard - Normal Variation Report REV00.

Annex A: Figures

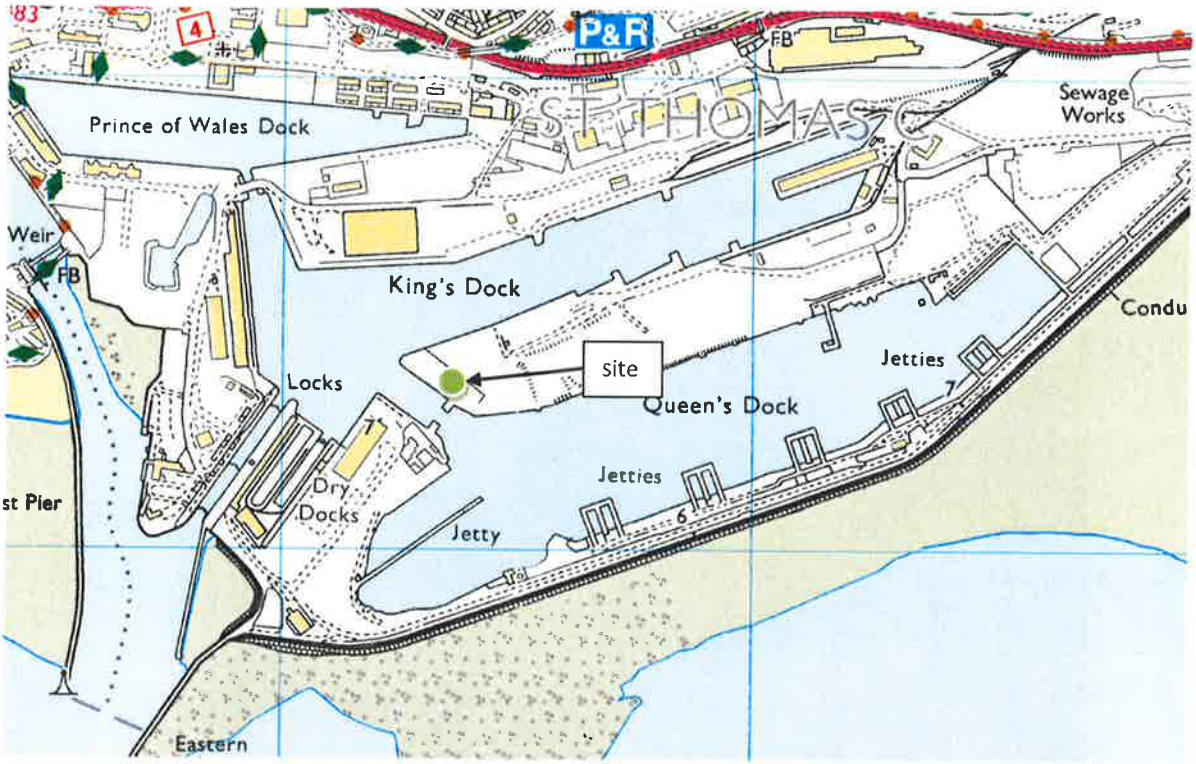


Figure A1: *Site location (Ordnance Survey 1:25,000)*

Ordnance Survey 1: 25,000 scale map with the permission of The Controller of Her Majesty's Stationery Office, Crown Copyright Earth and Marine Environmental Consultants Ltd, Licence No. 100050755

Figure A2: *Installation boundary (outline in green) and surface water outfall, scale as stated*

Google 2019

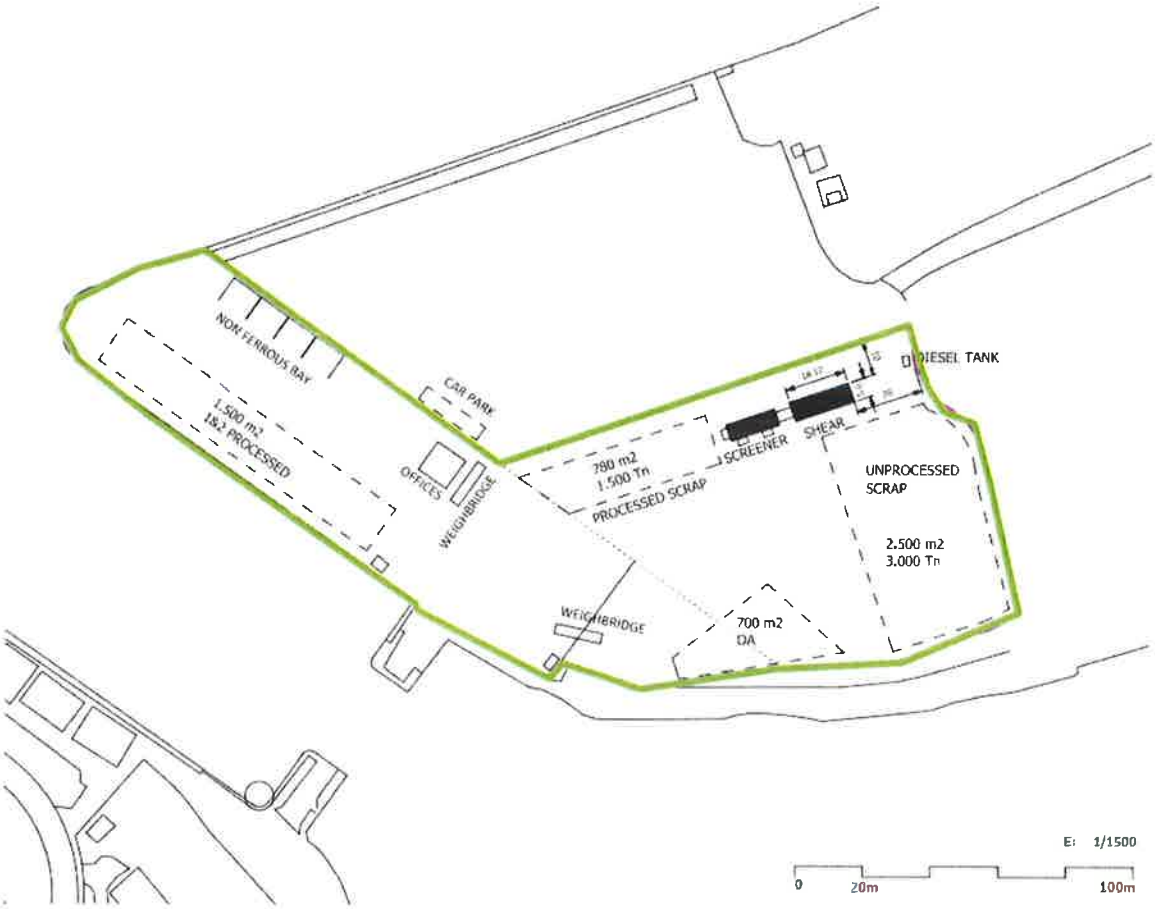


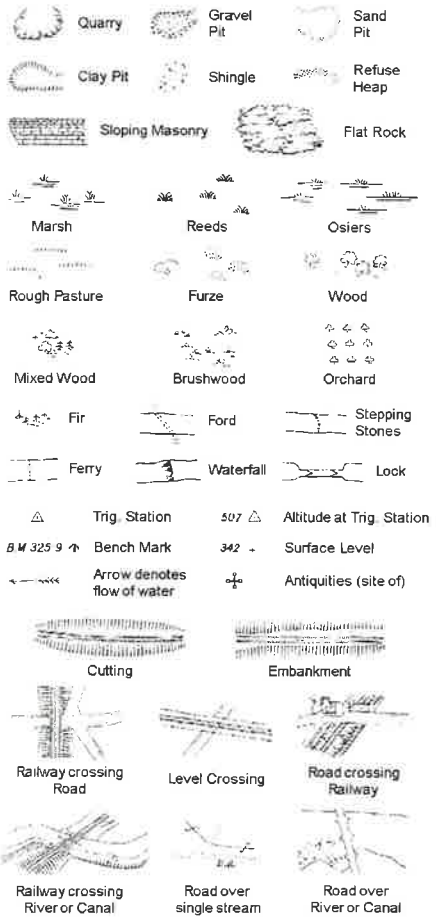
Figure A3: *Installation boundary (outline in green) and layout, scale as stated*

Celsa, 2019

Annex B: Historical Maps

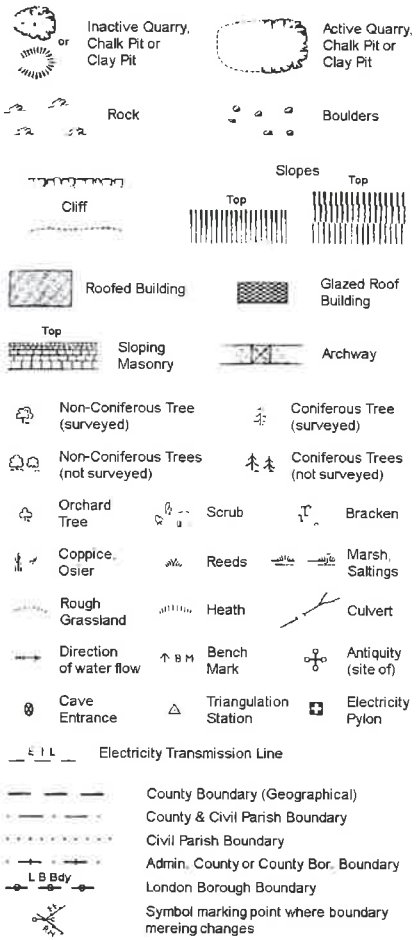
Historical Mapping Legends

Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



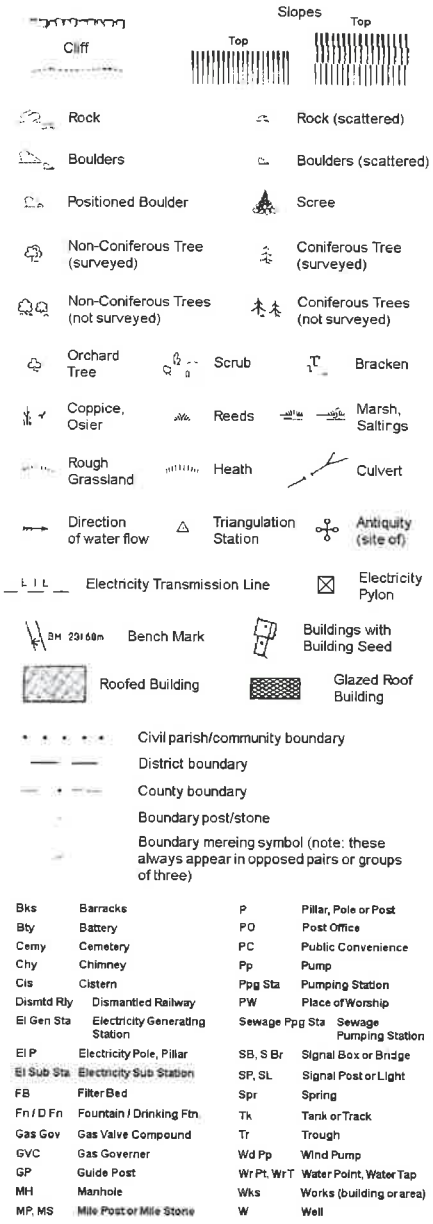
B P B S	Boundary Post or Stone	P.C.B	Police Call Box
B.R.	Bridle Road	P	Pump
E.P	Electricity Pylon	S.P	Signal Post
F.B.	Foot Bridge	Sl.	Sluice
F.P.	Foot Path	Sp.	Spring
G.P	Guide Post or Board	T.C.B	Telephone Call Box
M.S	Mile Stone	Tr.	Trough
M.P M.R	Mooring Post or Ring	W	Well

Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250



BH	Beer House	P	Pillar, Pole or Post
BP, BS	Boundary Post or Stone	PO	Post Office
Cn, C	Capstan, Crane	PC	Public Convenience
Chy	Chimney	PH	Public House
D Fn	Drinking Fountain	Pp	Pump
El P	Electricity Pillar or Post	SB, S Br	Signal Box or Bridge
FAP	Fire Alarm Pillar	SP, SL	Signal Post or Light
FB	Foot Bridge	Spr	Spring
GP	Guide Post	Tk	Tank or Track
H	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	Wr Pt, Wr T	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

Large-Scale National Grid Data 1:2,500 and 1:1,250



Bks	Barracks	P	Pillar, Pole or Post
Bty	Battery	PO	Post Office
Cemy	Cemetery	PC	Public Convenience
Chy	Chimney	Pp	Pump
Cis	Cistern	Ppg Sta	Pumping Station
Dismtd Rly	Dismantled Railway	PW	Place of Worship
El Gen Sta	Electricity Generating Station	Sewage Ppg Sta	Sewage Pumping Station
El P	Electricity Pole, Pillar	SB, S Br	Signal Box or Bridge
El Sub Sta	Electricity Sub Station	SP, SL	Signal Post or Light
FB	Filter Bed	Spr	Spring
Fn / D Fn	Fountain / Drinking Ftn.	Tk	Tank or Track
Gas Gov	Gas Valve Compound	Tr	Trough
GVC	Gas Governer	Wd Pp	Wind Pump
GP	Guide Post	Wr Pt, Wr T	Water Point, Water Tap
MH	Manhole	Wks	Works (building or area)
MP, MS	Mile Post or Mile Stone	W	Well

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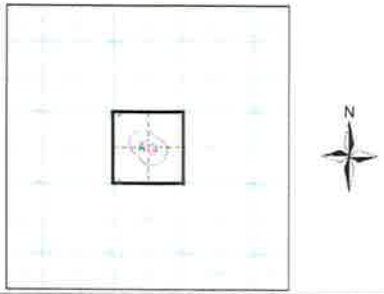
Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Glamorganshire	1:2,500	1879	2
Glamorganshire	1:2,500	1899	3
Glamorganshire	1:2,500	1918 - 1919	4
Historical Aerial Photography	1:1,250	1946 - 1947	5
Ordnance Survey Plan	1:1,250	1948 - 1949	6
Ordnance Survey Plan	1:2,500	1950 - 1951	7
Ordnance Survey Plan	1:1,250	1960 - 1966	8
Ordnance Survey Plan	1:1,250	1966 - 1974	9
Additional SIMs	1:1,250	1989 - 1991	10
Large-Scale National Grid Data	1:1,250	1992	11
Large-Scale National Grid Data	1:1,250	1994	12
Large-Scale National Grid Data	1:1,250	1996	13
Historical Aerial Photography	1:2,500	2014	14

Historical Map - Segment A13



Order Details

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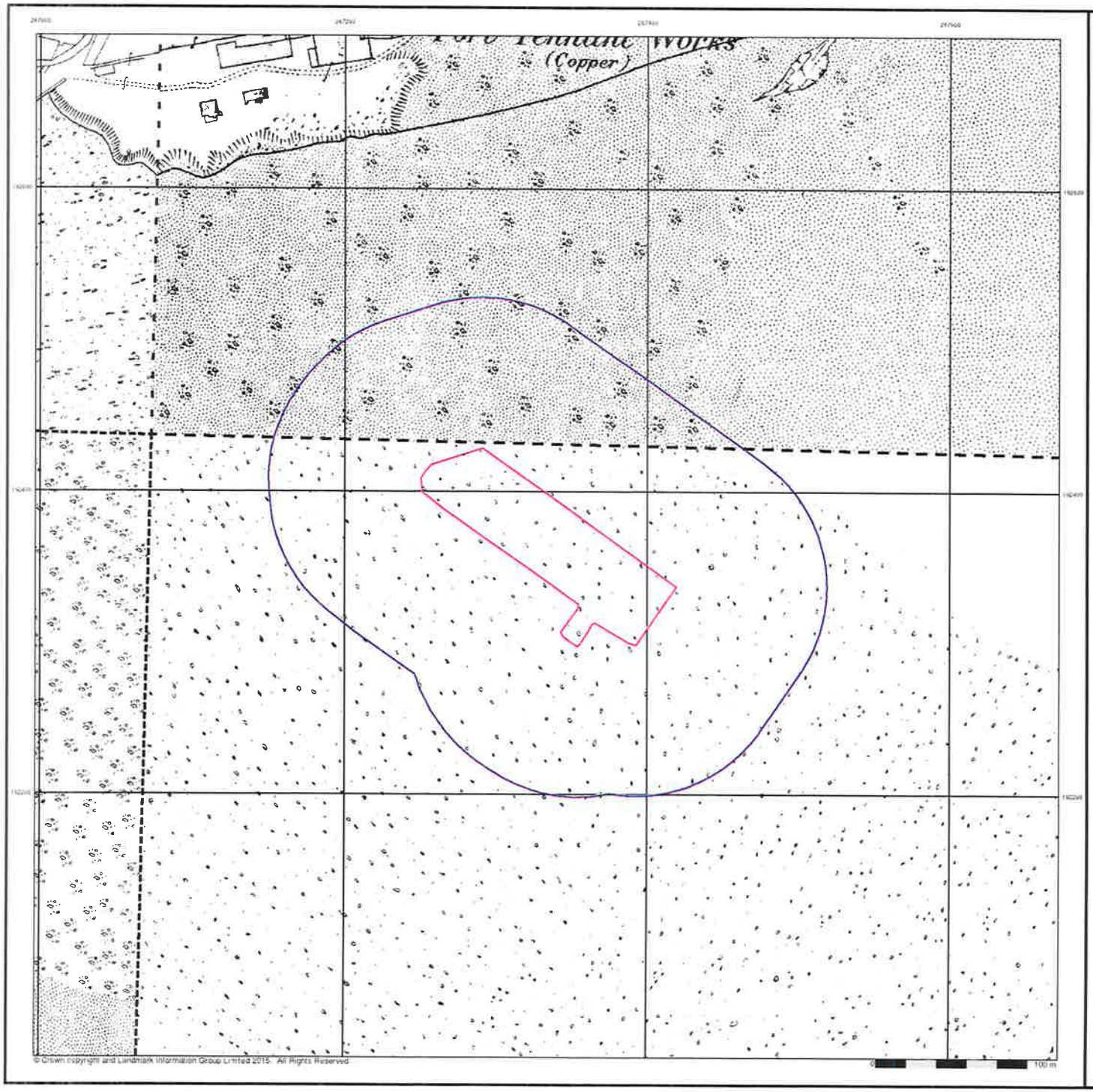
National Grid Reference: 267330, 192360
Slice: A
Site Area (Ha): 0.86
Search Buffer (m): 100

Site Details

Site at, Swansea Bay, Swansea

Landmark INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



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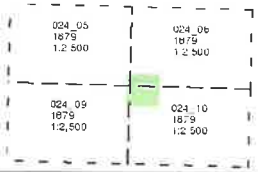
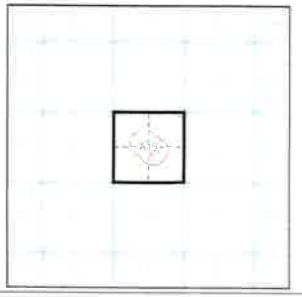
Glamorganshire
Published 1879
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



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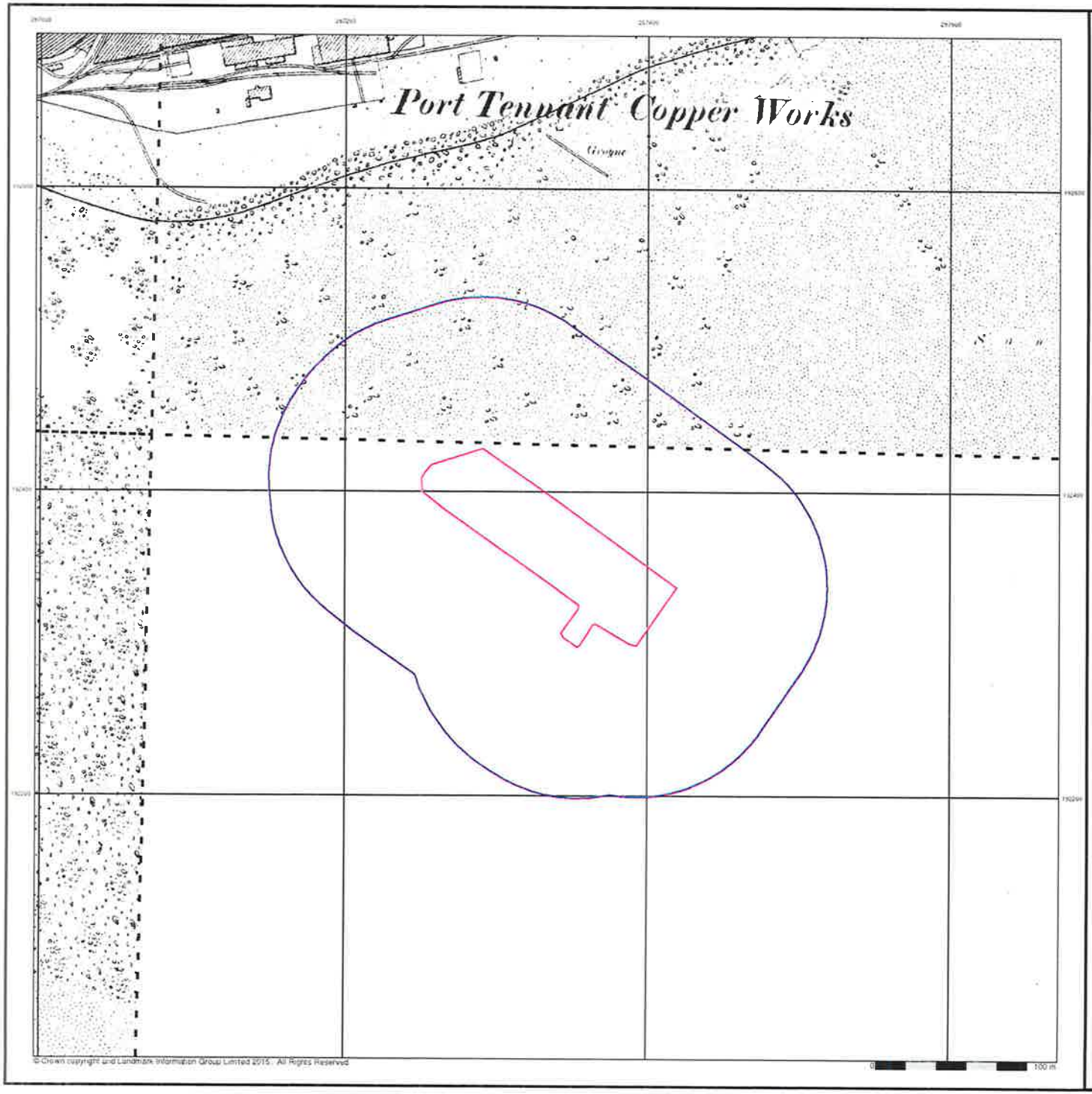
Site Details

Site at, Swansea Bay, Swansea



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Glamorganshire
Published 1899
Source map scale - 1:2,500

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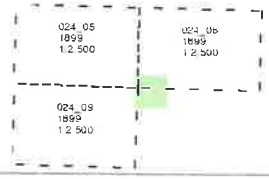
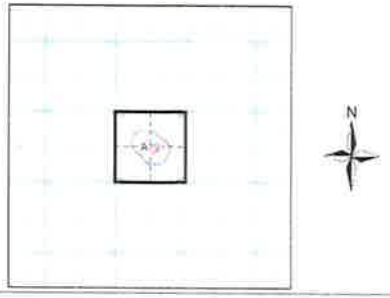
Map Name(s) and Date(s)



Historical Map - Segment A13



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Customer Ref:	017-1569
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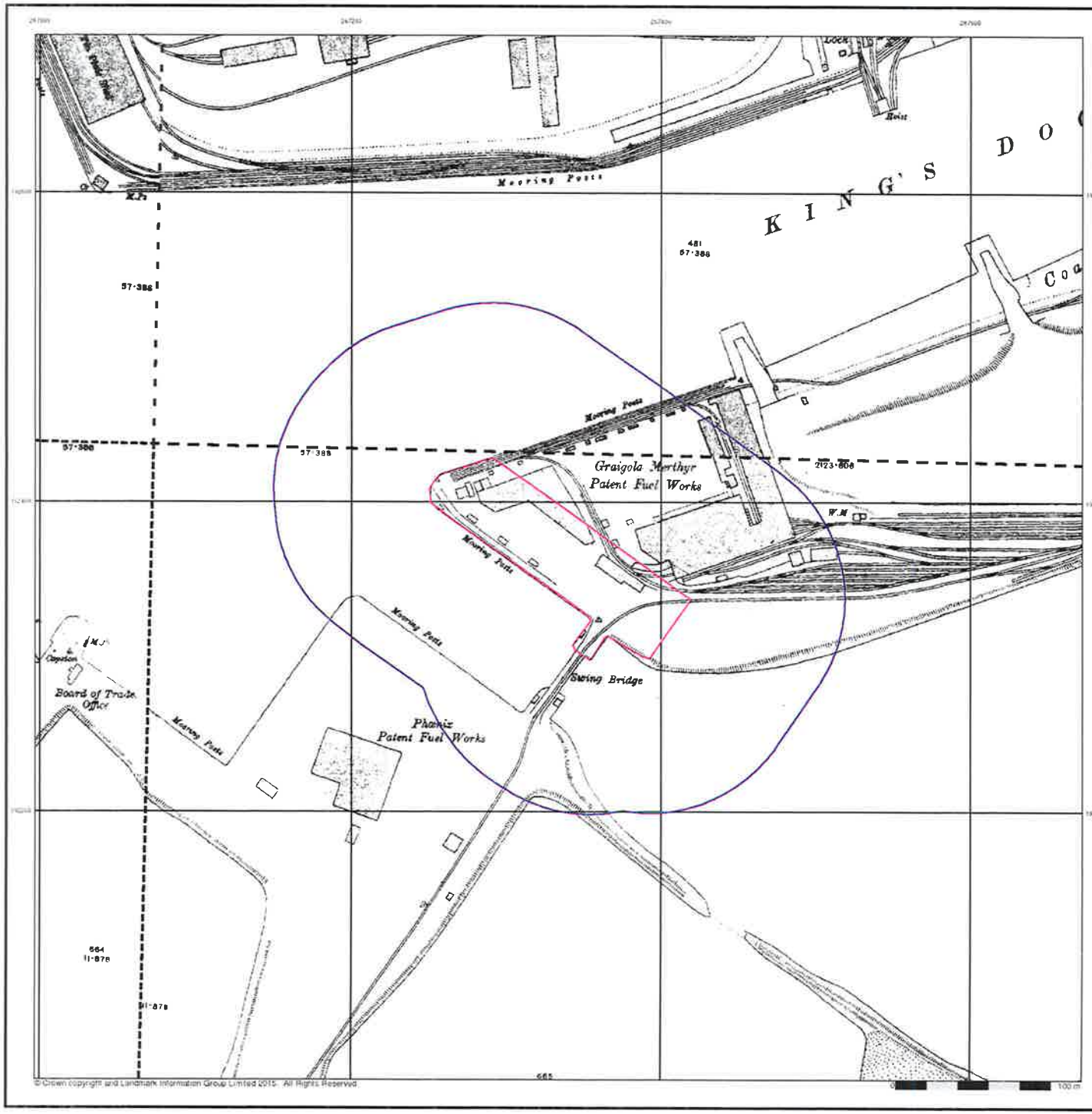
Search Buffer (m):	100

Site Details

Site at, Swansea Bay, Swansea

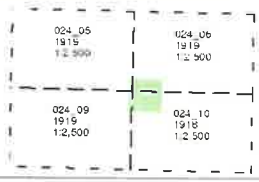


EAME
Earth & Marine Environmental Consultants

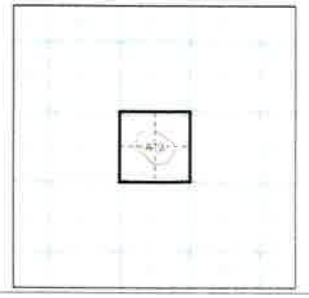
Glamorganshire
Published 1918 - 1919
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



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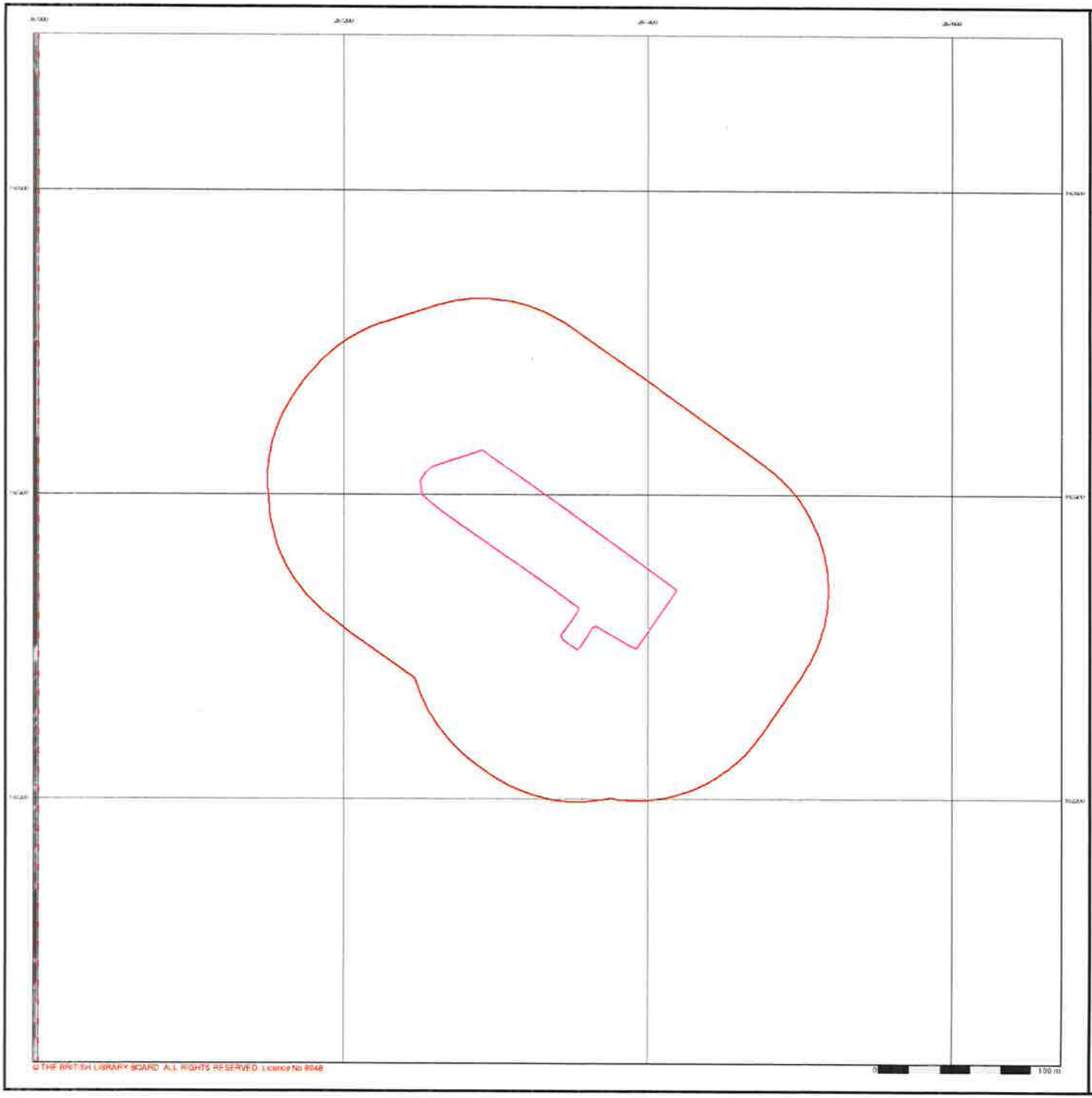
Site Details

Site at, Swansea Bay, Swansea



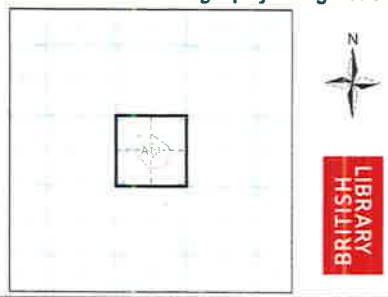
EAME
Earth & Marine Environmental Consultants

Historical Aerial Photography
Published 1946 - 1947
Source map scale - 1:1,250

The Historical Aerial Photos were produced by the Ordnance Survey at a scale of 1:1,250 and 1:10,560 from Air Force photography. They were produced between 1944 and 1951 as an interim measure, pending preparation of conventional mapping, due to post war resource shortages. New security measures in the 1950's meant that every photograph was re-checked for potentially unsafe information with security sites replaced by fake fields or clouds. The original editions were withdrawn and only later made available after a period of fifty years although due to the accuracy of the editing, without viewing both revisions it is not easy to spot the edits. Where available Landmark have included both revisions.

Map Name(s) and Date(s)

Historical Aerial Photography - Segment A13



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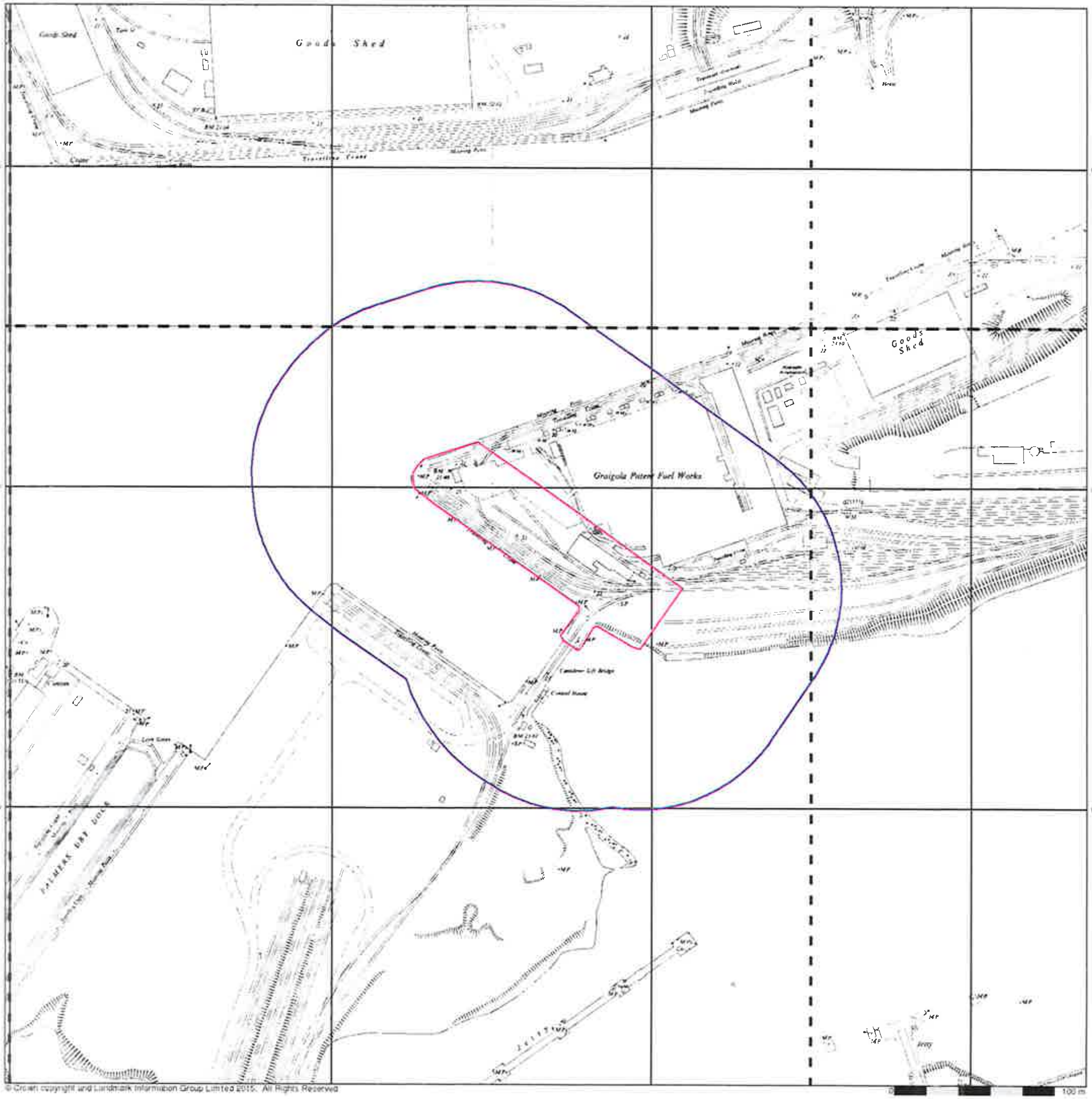
Site Details

Site at, Swansea Bay, Swansea



EAME
Earth & Marine Environmental Consultants

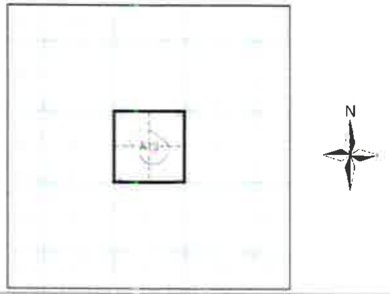
Ordnance Survey Plan
Published 1948 - 1949
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

SS6892NE 1948 1:1,250	SS6792NW 1949 1:1,250	SS6792NE 1949 1:1,250
SS6892SE 1948 1:1,250	SS6792SW 1949 1:1,250	SS6792SE 1949 1:1,250

Historical Map - Segment A13



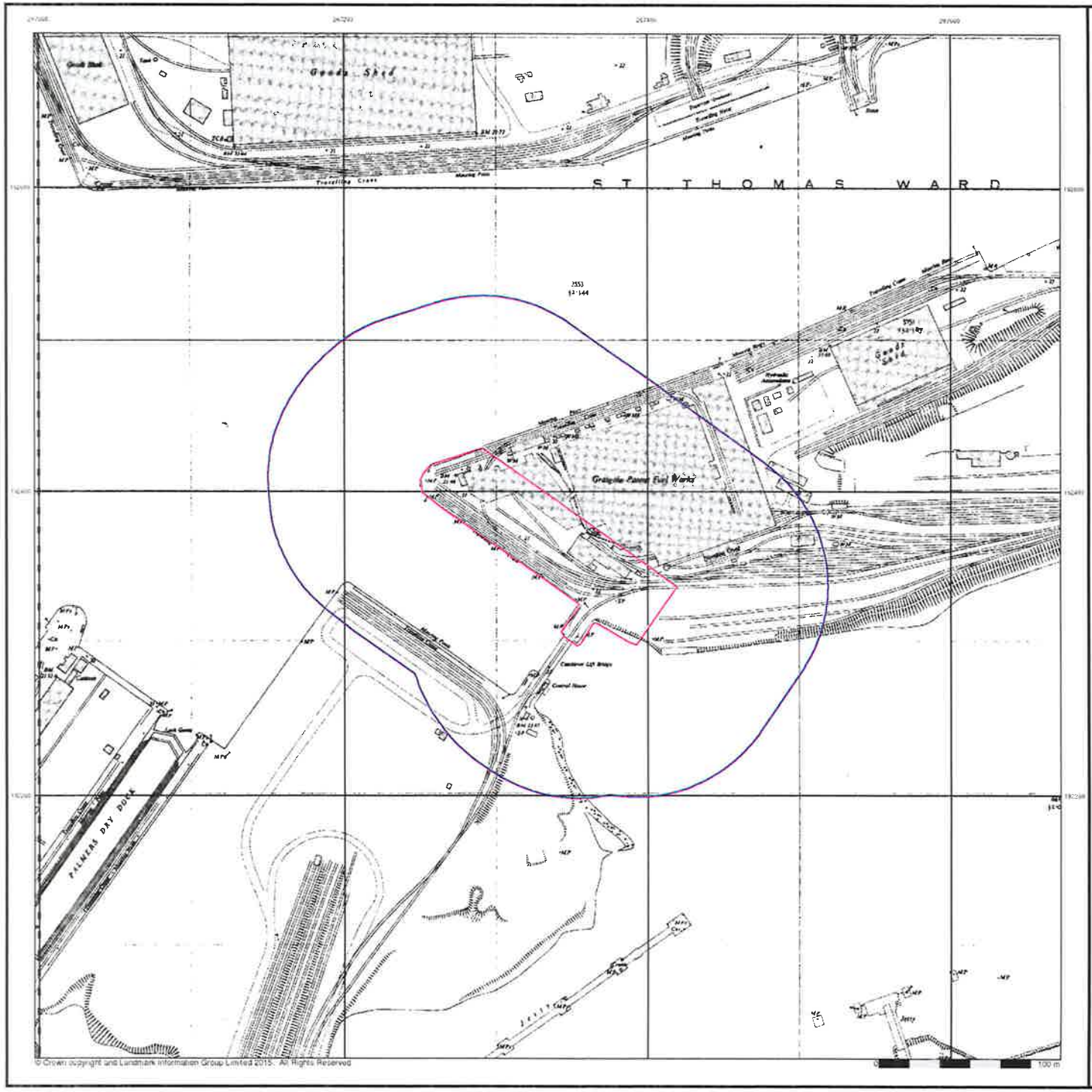
Order Details

Order Number: 138065595_1_1
Customer Ref: 017-1569
National Grid Reference: 267330, 192360
Slice: A
Site Area (Ha): 0.86
Search Buffer (m): 100

Site Details

Site at, Swansea Bay, Swansea

Landmark INFORMATION GROUP
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



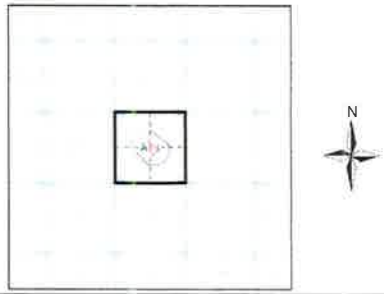
EAME
Earth & Marine Environmental Consultants

Ordnance Survey Plan
Published 1950 - 1951
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

Historical Map - Segment A13

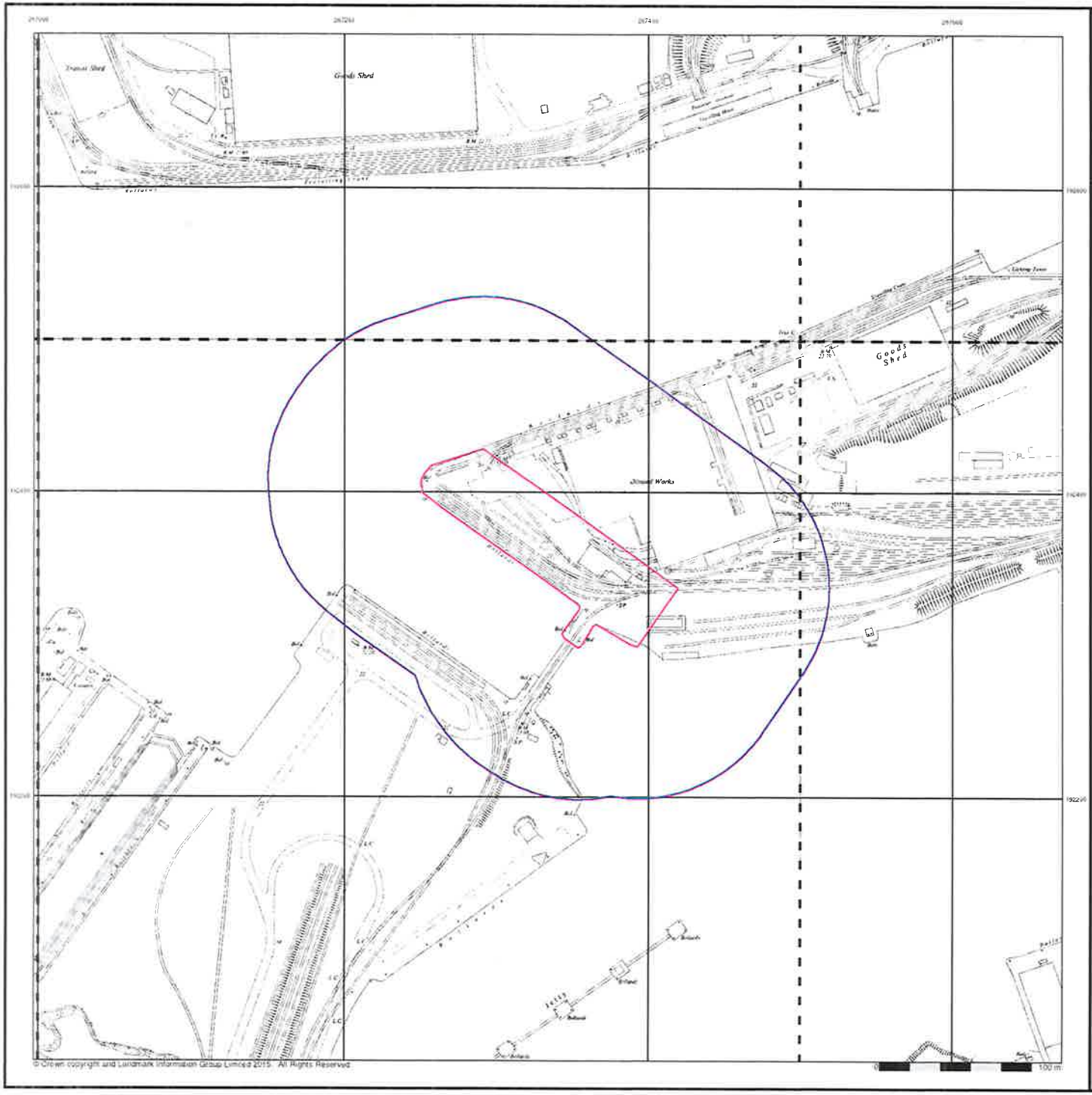


Order Details

Order Number:	138065595_1_1
Customer Ref:	017-1569
National Grid Reference:	267330, 192360
Slice:	A
Site Area (Ha):	0.86
Search Buffer (m):	100

Site Details

Site at, Swansea Bay, Swansea

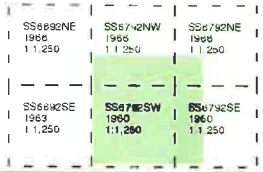


EAME
Earth & Marine Environmental Consultants

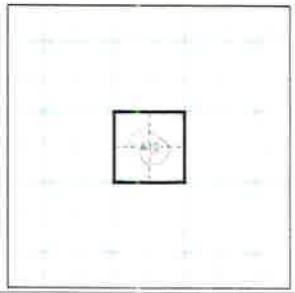
Ordnance Survey Plan
Published 1960 - 1966
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	138065595_1_1
Customer Ref:	017-1569
National Grid Reference:	267330, 192360
Slice:	A
Site Area (Ha):	0.86
Search Buffer (m):	100

Site Details

Site at, Swansea Bay, Swansea

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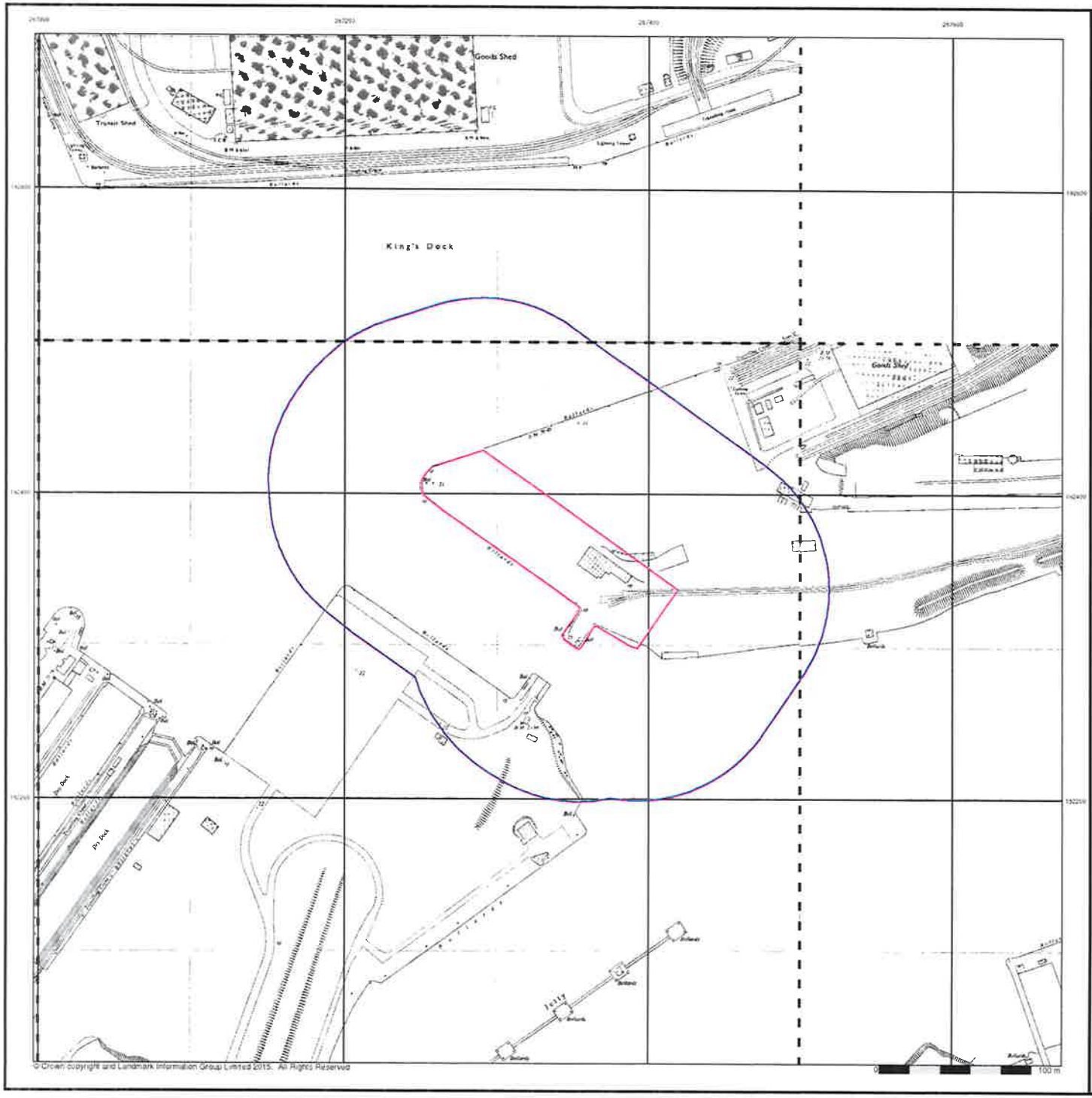
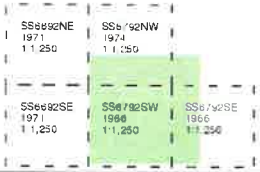


EAME
Earth & Marine Environmental Consultants

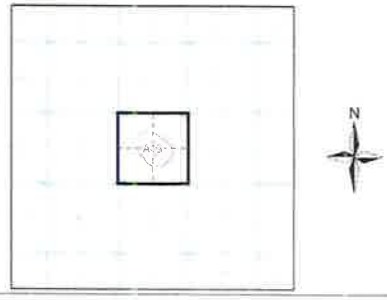
Ordnance Survey Plan
Published 1966 - 1974
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	138065595_1_1
Customer Ref:	017-1569
National Grid Reference:	267330, 192360
Slice:	A
Site Area (Ha):	0.86
Search Buffer (m):	100

Site Details

Site at, Swansea Bay, Swansea

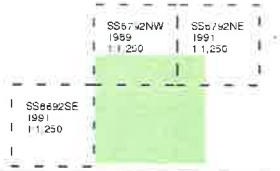
Landmark INFORMATION GROUP
Tel 0844 844 9952
Fax 0844 844 9951
Web www.envirocheck.co.uk

EAME
Earth & Marine Environmental Consultants

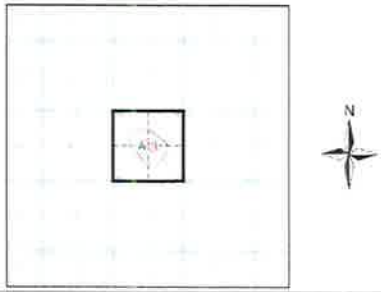
Additional SIMs
Published 1989 - 1991
Source map scale - 1:1,250

The SIM cards (Ordnance Survey's "Survey of Information on Microfilm") are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13

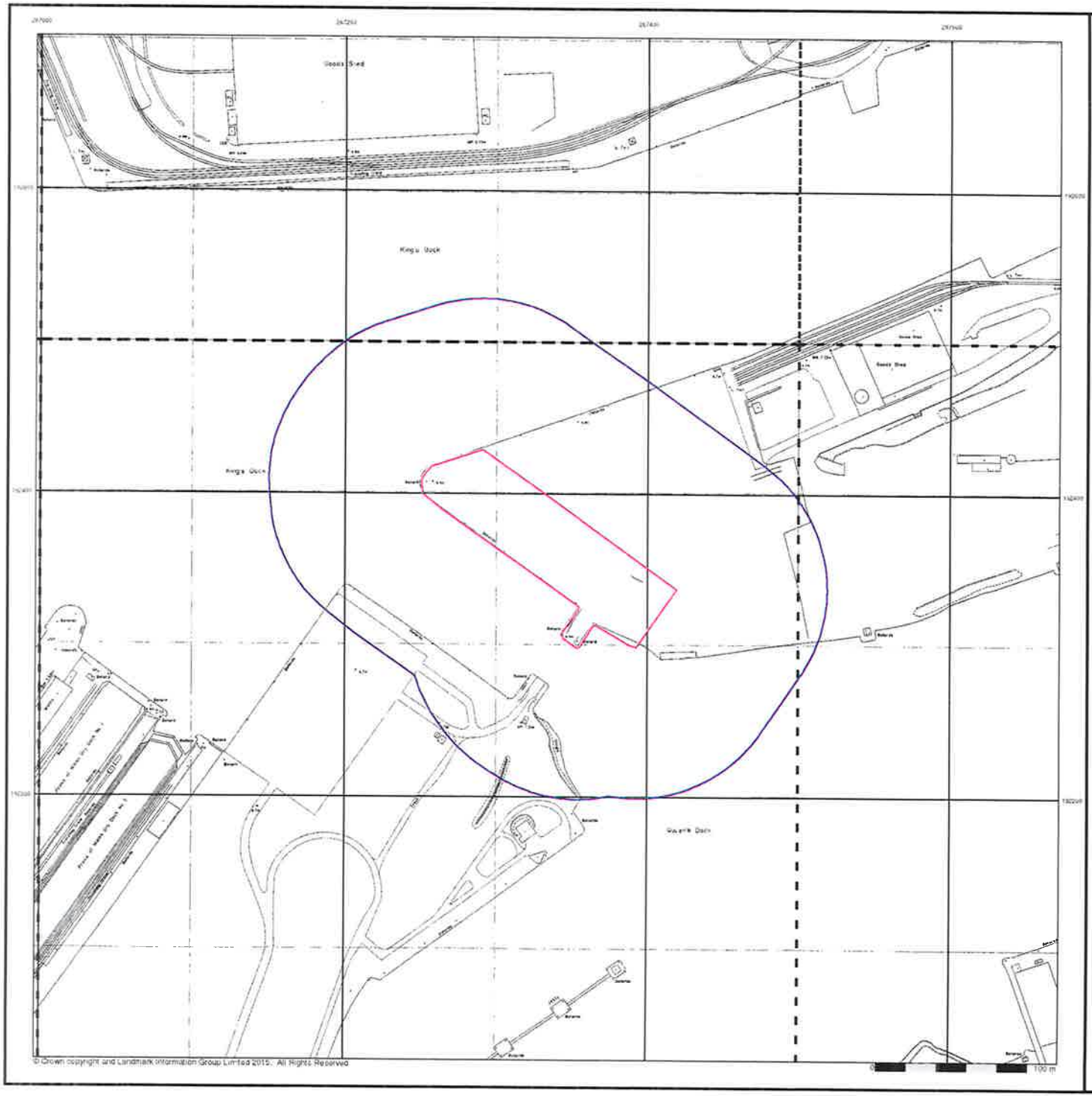


Order Details

Order Number:	138065595_1_1
Customer Ref:	017-1569
National Grid Reference:	267330, 192360
Slice:	A
Site Area (Ha):	0.86
Search Buffer (m):	100

Site Details

Site at, Swansea Bay, Swansea

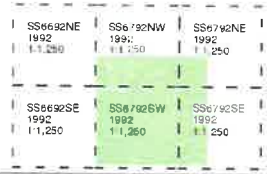


EAME
Earth & Marine Environmental Consultants

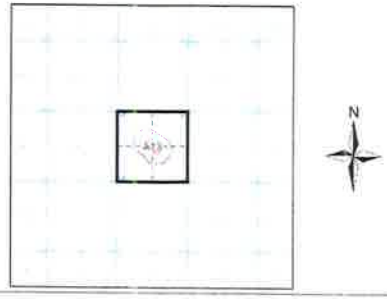
Large-Scale National Grid Data
Published 1992
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



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Slice:	A
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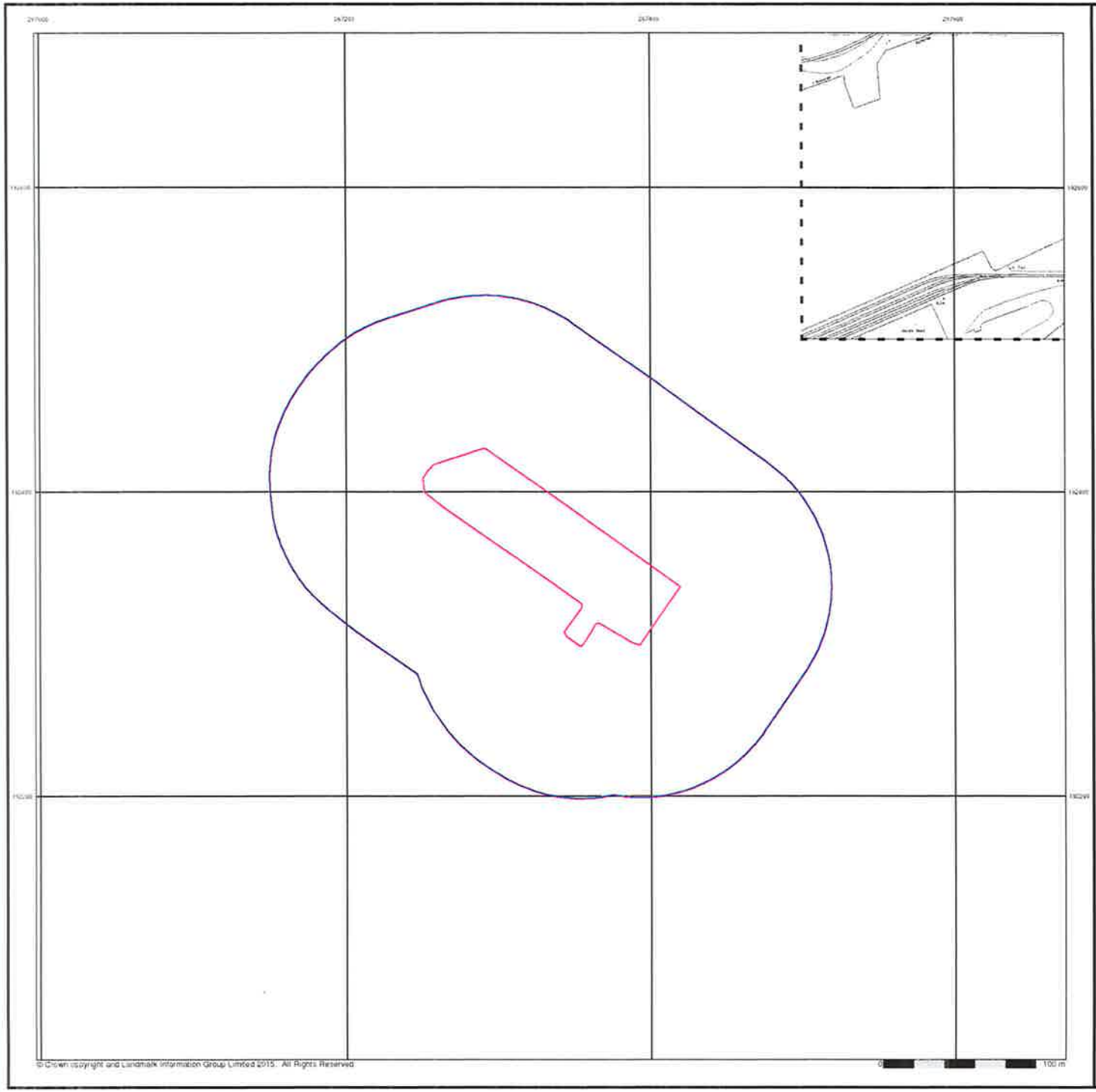
Web www.envirocheck.co.uk

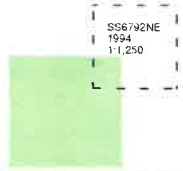


EAME
Earth & Marine Environmental Consultants

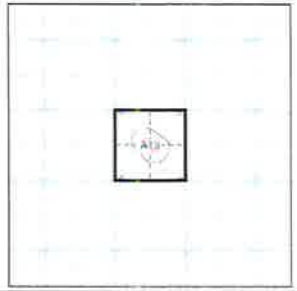
Large-Scale National Grid Data
Published 1994
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



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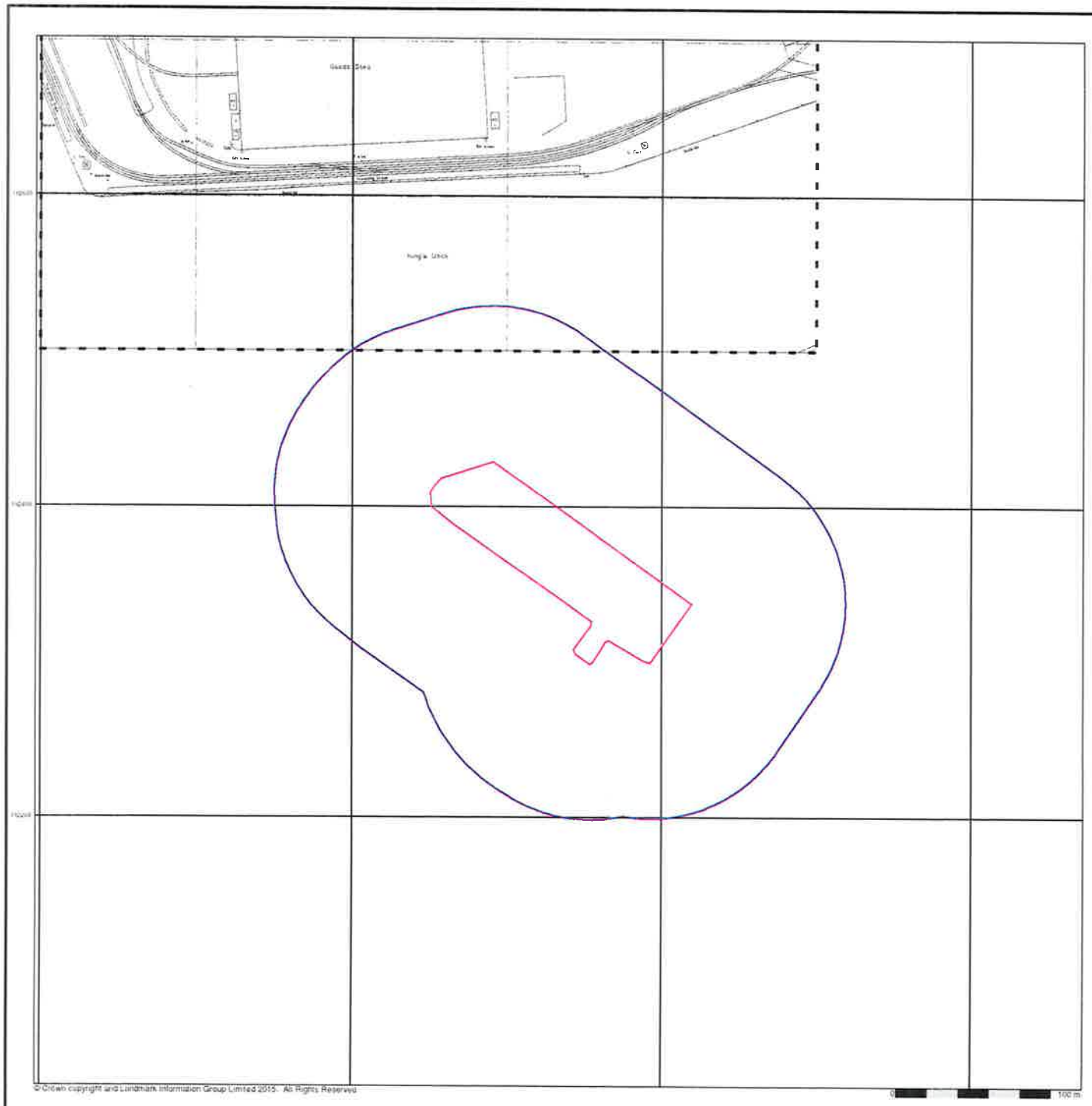
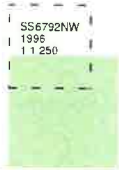


EAME
Earth & Marine Environmental Consultants

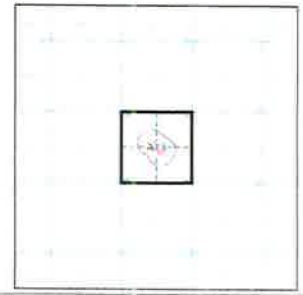
Large-Scale National Grid Data
Published 1996
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	138065595_1_1
Customer Ref:	017-1569
National Grid Reference:	267330, 192360
Slice:	A
Site Area (Ha):	0.86
Search Buffer (m):	100

Site Details

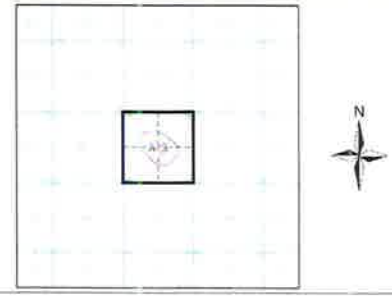
Site at, Swansea Bay, Swansea

EAME
Earth & Marine Environmental Consultants

Historical Aerial Photography
Published 2014

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great Britain

Historical Aerial Photography - Segment A13



Order Details

Order Number:	138065595_1_1
Customer Ref:	017-1569
National Grid Reference:	267330, 192360
Slice:	A
Site Area (Ha):	0.86
Search Buffer (m):	100

Site Details

Site at, Swansea Bay, Swansea

Historical Mapping Legends

Ordnance Survey County Series 1:10,560

Gravel Pit
Sand Pit
Other Pits
Quarry
Shingle
Orchard
Osiers
Reeds
Marsh
Mixed Wood
Deciduous
Brushwood
Fir
Furze
Rough Pasture
Arrow denotes flow of water
Trigonometrical Station
Site of Antiquities
Bench Mark
Pump, Guide Post, Signal Post
Well, Spring, Boundary Post
285 Surface Level
Sketched Contour
Instrumental Contour
Main Roads
Fenced
Un-Fenced
Minor Roads
Fenced
Un-Fenced
Sunken Road
Raised Road
Road over Railway
Railway over River
Railway over Road
Level Crossing
Road over River or Canal
Road over Stream
Road over Stream
County Boundary (Geographical)
County & Civil Parish Boundary
Administrative County & Civil Parish Boundary
Co. Boro. Bdy.
County Borough Boundary (England)
Co. Burgh Bdy.
County Burgh Boundary (Scotland)
R.D. Bdy.
Rural District Boundary
Civil Parish Boundary

Ordnance Survey Plan 1:10,000

Chalk Pit, Clay Pit or Quarry
Gravel Pit
Sand Pit
Disused Pit or Quarry
Refuse or Slag Heap
Lake, Loch or Pond
Dunes
Boulders
Coniferous Trees
Non-Coniferous Trees
Orchard
Scrub
Coppice
Bracken
Heath
Rough Grassland
Marsh
Reeds
Saltings
Building
Direction of Flow of Water
Shingle
Sand
Glasshouse
Pylon
Sloping Masonry
Electricity Transmission Line
Pole
Cutting
Embankment
Standard Gauge Multiple Track
Standard Gauge Single Track
Road Under
Road Over
Level Crossing
Foot Bridge
Siding, Tramway or Mineral Line
Narrow Gauge
Geographical County
Administrative County, County Borough or County of City
Municipal Borough, Urban or Rural District, Burgh or District Council
Borough, Burgh or County Constituency
Shown only when not coincident with other boundaries
Civil Parish
Shown alternately when coincidence of boundaries occurs

BP, BS	Boundary Post or Stone	Pol Sta	Police Station
Ch	Church	PO	Post Office
CH	Club House	PC	Public Convenience
F E Sta	Fire Engine Station	PH	Public House
FB	Foot Bridge	SB	Signal Box
Fn	Fountain	Spr	Spring
GP	Guide Post	TCB	Telephone Call Box
MP	Mile Post	TCP	Telephone Call Post
MS	Mile Stone	W	Well

1:10,000 Raster Mapping

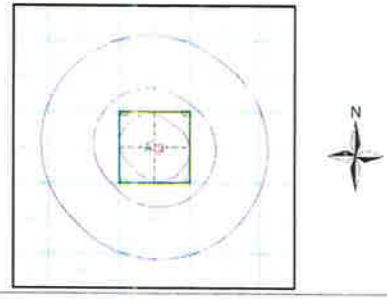
Gravel Pit
Refuse tip or slag heap
Rock
Rock (scattered)
Boulders
Boulders (scattered)
Shingle
Mud
Sand
Sand Pit
Slopes
Top of cliff
General detail
Underground detail
Overhead detail
Narrow gauge railway
Multi-track railway
Single track railway
County boundary (England only)
Civil, parish or community boundary
District, Unitary, Metropolitan, London Borough boundary
Constituency boundary
Area of wooded vegetation
Non-coniferous trees
Non-coniferous trees (scattered)
Coniferous trees
Coniferous trees (scattered)
Positioned tree
Orchard
Coppice or Osiers
Rough Grassland
Heath
Scrub
Marsh, Salt Marsh or Reeds
Water feature
Flow arrows
MHW(S) Mean high water (springs)
MLW(S) Mean low water (springs)
Telephone line (where shown)
Electricity transmission line (with poles)
BM 123.45 m Bench mark (where shown)
Triangulation station
Point feature (e.g. Guide Post or Mile Stone)
Pylon, flare stack or lighting tower
Site of (antiquity)
Glasshouse
General Building
Important Building

EAME
Earth & Marine Environmental Consultants

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Glamorganshire	1:10,560	1884	3
Glamorganshire	1:10,560	1900	4
Glamorganshire	1:10,560	1921	5
Glamorganshire	1:10,560	1938	6
Historical Aerial Photography	1:10,560	1949	7
Historical Aerial Photography	1:10,560	1949	8
Glamorganshire	1:10,560	1951	9
Ordnance Survey Plan	1:10,000	1964	10
Swansea	1:10,000	1976	11
Ordnance Survey Plan	1:10,000	1979	12
Ordnance Survey Plan	1:10,000	1989	13
10K Raster Mapping	1:10,000	1999	14
10K Raster Mapping	1:10,000	2006	15
VectorMap Local	1:10,000	2017	16

Historical Map - Slice A



Order Details

Order Number: 138065595_1_1
Customer Ref: 017-1569
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Site Area (Ha): 0.86
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Site Details

Site at, Swansea Bay, Swansea

Landmark INFORMATION GROUP

Russian Military Mapping Legends

1:5,000 and 1:10,000 mapping

a. Not drawn to scale b. Drawn to scale

- Government and Administrative Buildings
- Military and Industrial Buildings
- Military and Communication Areas
- Subway Entrance
- Fireproof Building
- Prominent Fireproof Building
- Non-fireproof Building
- Non-fireproof Building (non-dwelling)
- Factory, mill, and flour mill, with chimneys
- Factory, mill, and flour mill, without chimneys
- Power Station, drawn to scale
- Hydroelectric Power Station
- Radio Station, drawn to scale
- Telephone Station, drawn to scale
- Abandoned Open-pit Mine or Quarry
- Open-pit Salt Mine
- Pit
- Oil Deposit or Well
- Oil Seepage
- Tailings Pile
- Fuel Storage Tanks
- Natural Gas Tank
- Bench Mark
- Drill Hole
- Burial Mound
- Triangulation Point on Burial Mound
- Single-track Railroad
- Railroad and Station Building
- Coniferous Forest
- Deciduous Forest
- Mixed Forest
- Lawns
- Citrus Orchard
- Wet Ground
- Scattered Vegetation

243,8 — Values for prominent elevations

186.0 — Numbers for spot elevations, depth soundings, contour lines, etc.

0.2 — Velocity of the current, width of river bed, depth of river

Fractional terms: length and capacity of bridges; depth of fords and condition of the river bottom; height of forest and the diameter of trees

Russian Alphabet (For reference and phonetic interpretation of map text)

А а (A)	З з (Z)	П п (P)	Ч ч (CH)
Б б (B)	И и (I)	Р р (R)	Ш ш (SH)
В в (V)	Й й (Y)	С с (S)	Щ щ (SHCH)
Г г (G)	К к (K)	Т т (T)	ъ (-)
Д д (D)	Л л (L)	У у (U)	ы (Y)
Е е (E)	М м (M)	Ф ф (F)	ь (')
Ё ё (YO)	Н н (N)	Х х (KH)	Э э (E)
Ж ж (ZH)	О о (O)	Ц ц (TS)	Ю ю (YU or IU)
			Я я (YA or IA)

1:25,000 mapping

a. Not drawn to scale b. Drawn to scale

- Government and Administrative Buildings
- Military and Industrial Buildings
- Military and Communication Areas
- Subway Entrance
- Partly Demolished Buildings
- Demolished Buildings
- Built-Up Area with Fireproof Buildings Predominant
- Built-Up Area with Non-Fireproof Buildings Predominant
- Individual Fireproof Building
- Prominent Industrial Building
- Individual Dwelling, Fireproof
- Ruins of an Individual Dwelling
- Factory or Mill Chimney
- Factory or Mill with Chimney
- Factory or Mill without Chimney
- Mine or Open Pit Mine
- Operating Shaft or Mine
- Non-Operating Shaft or Mine
- Salt Mine
- Tailings Pile
- Pit
- Stone Quarry
- Gas Pump or Service Station
- Fuel Storage or Natural Gas Tank
- Oil or Natural Gas Derrick
- Small Hydroelectric Power Station
- Power Station
- Transformer Station
- Cemetery
- Burial Mound (height in metres)
- Triangulation Point on Burial Mound
- Triangulation Point
- Bench Mark
- Bench Mark (monumented)
- Telegraph Office
- Telephone Station
- Radio Station
- Radio Tower
- Airfield or Seaplane Base
- Landing Strip
- Telegraph/Telephone Lines
- Main Highway
- Highway under Construction
- Improved Dirt Road (former truck road)
- Double-track Railroad with First Class Station
- Dismantled Railroad
- Railroad Under Construction
- Shore Embankment
- River or Ditch with Embankment
- Water Level Mark
- Well
- Water Reservoir or Rain Water Pit
- Spring
- Isobath with value
- Heavy (Index) Contour Line
- Contour Line and Value
- Half Contour Line
- Spot Elevation Value
- Coniferous
- Deciduous
- Mixed
- Scrub

Key to Numbers on Mapping

SS69SE_Swansea

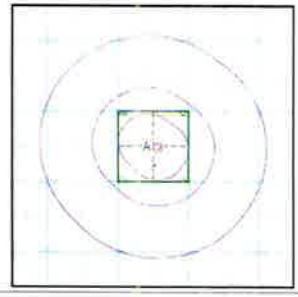
No.	Description
6	Dry Dock
7	Dry Dock
10	Factory (Briquette Fuel)
11	Factory (Briquette Fuel)
12	Factory (Briquette Fuel)
84	Post Office
84	Warehouses And Moorage
85	Storage (Oil And Oil Products) And Moorage
86	Warehouses, Coal Chutes And Moorage
87	Port Administration
89	Railway Station (Freight)
91	Railway Station (Freight)
98	Custom House
103	Factory (Fish Powder)
106	Locks
108	Power Station (Thermo-Electric)

EAME
Earth & Marine Environmental Consultants

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Glamorganshire	1:10,560	1884	3
Glamorganshire	1:10,560	1900	4
Glamorganshire	1:10,560	1921	5
Glamorganshire	1:10,560	1938	6
Historical Aerial Photography	1:10,560	1949	7
Historical Aerial Photography	1:10,560	1949	8
Glamorganshire	1:10,560	1951	9
Ordnance Survey Plan	1:10,000	1964	10
Swansea	1:10,000	1976	11
Ordnance Survey Plan	1:10,000	1979	12
Ordnance Survey Plan	1:10,000	1989	13
10K Raster Mapping	1:10,000	1999	14
10K Raster Mapping	1:10,000	2006	15
VectorMap Local	1:10,000	2017	16

Russian Map - Slice A



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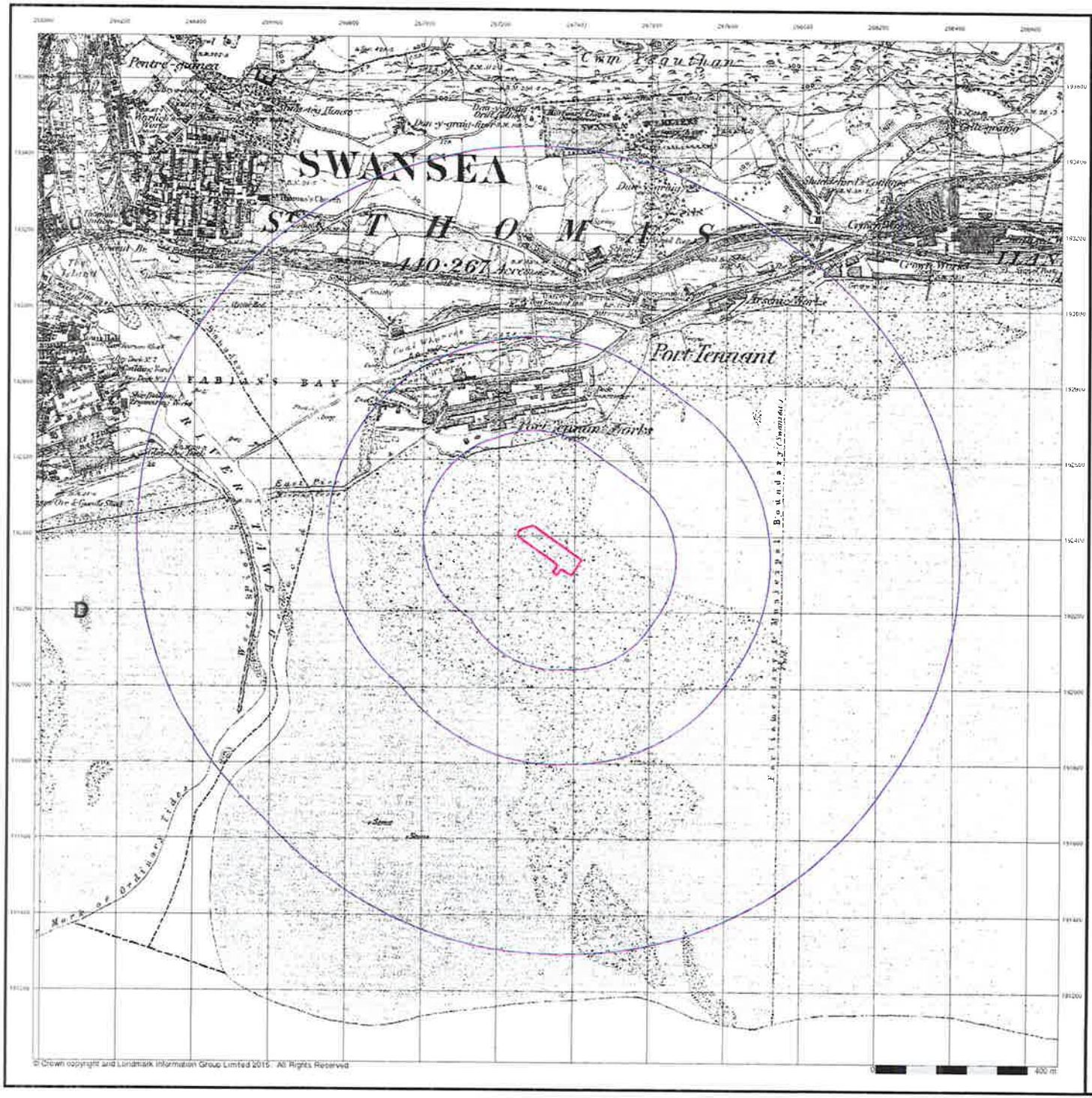
Landmark INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



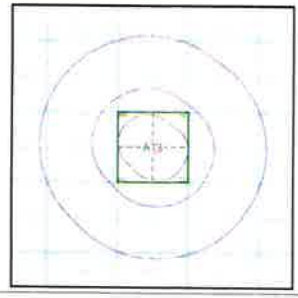
EAME
Earth & Marine Environmental Consultants

Glamorganshire
Published 1884
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

Historical Map - Slice A



Order Details

Order Number:	138065595_1_1
Customer Ref:	017-1569
National Grid Reference:	267330, 192360
Slice:	A
Site Area (Ha):	0.86
Search Buffer (m):	1000

Site Details

Site at, Swansea Bay, Swansea

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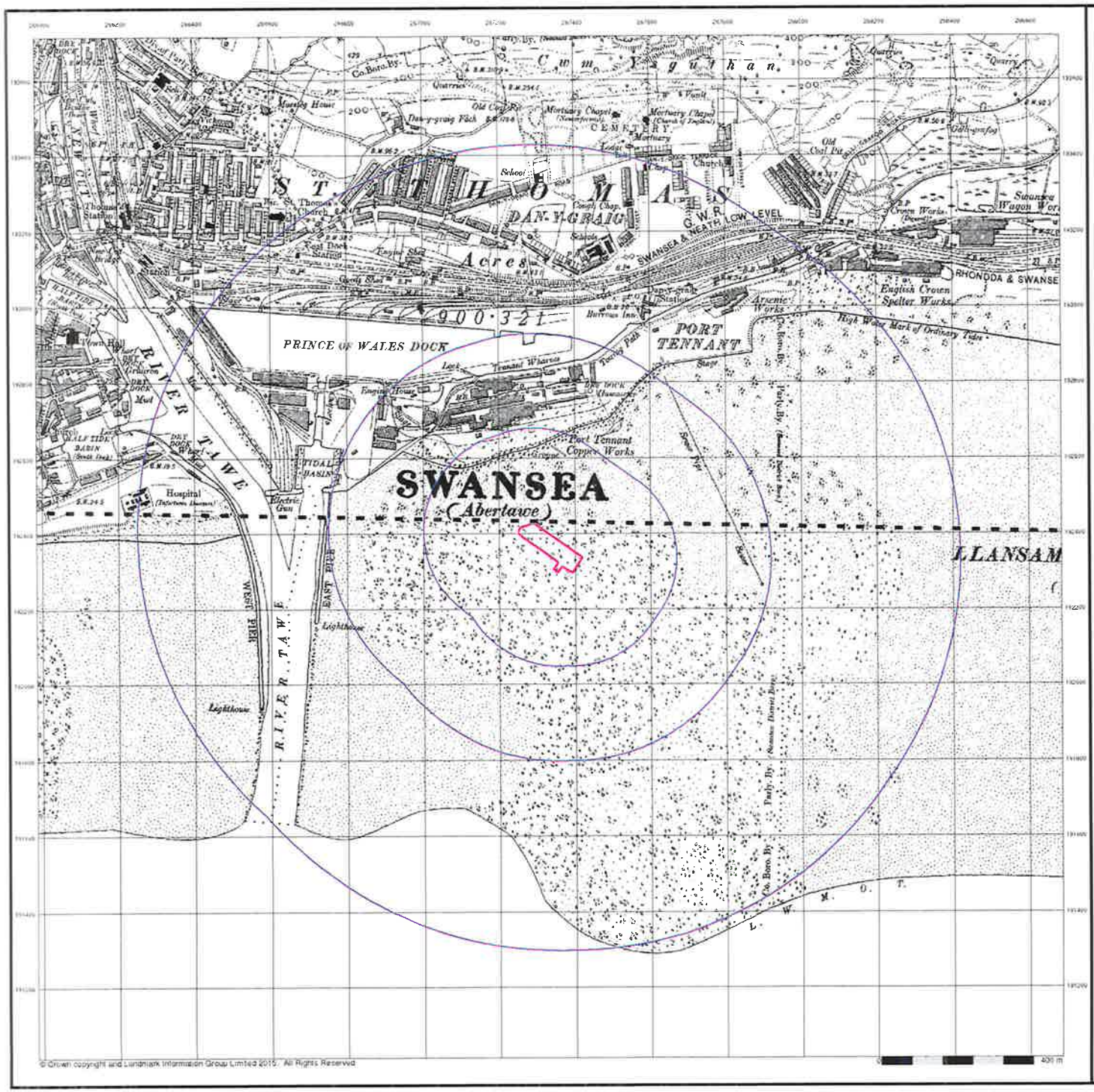
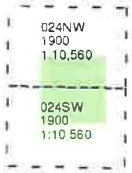


EAME
Earth & Marine Environmental Consultants

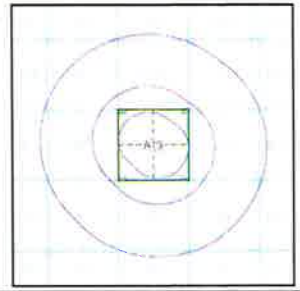
Glamorganshire
Published 1900
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas: these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number:	138065595_1_1
Customer Ref:	017-1569
National Grid Reference:	267330, 192360
Slice:	A
Site Area (Ha):	0.86
Search Buffer (m):	1000

Site Details

Site at, Swansea Bay, Swansea

EAME
Earth & Marine Environmental Consultants

Glamorganshire
Published 1921
Source map scale - 1:10,560

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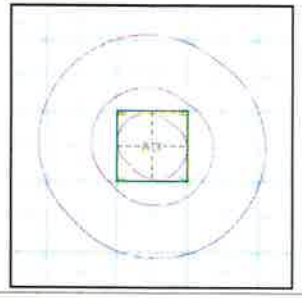
Map Name(s) and Date(s)

Historical Map - Slice A



Order Details

Order Number:	138065595_1_1
Customer Ref:	017-1569
National Grid Reference:	267330, 192360
Slice:	A
Site Area (Ha):	0.86
Search Buffer (m):	1000

Site Details

Site at, Swansea Bay, Swansea

EAME
Earth & Marine Environmental Consultants

Glamorganshire
Published 1938
Source map scale - 1:10,560

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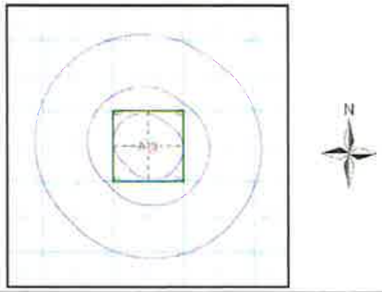
Map Name(s) and Date(s)

024NW
1938
1:10,560

024SW
1938
1:10,560

Historical Map - Slice A



Order Details

Order Number: 138065595_1_1
Customer Ref: 017-1569
National Grid Reference: 267330, 192360
Slice: A
Site Area (Ha): 0.86
Search Buffer (m): 1000

Site Details

Site at, Swansea Bay, Swansea

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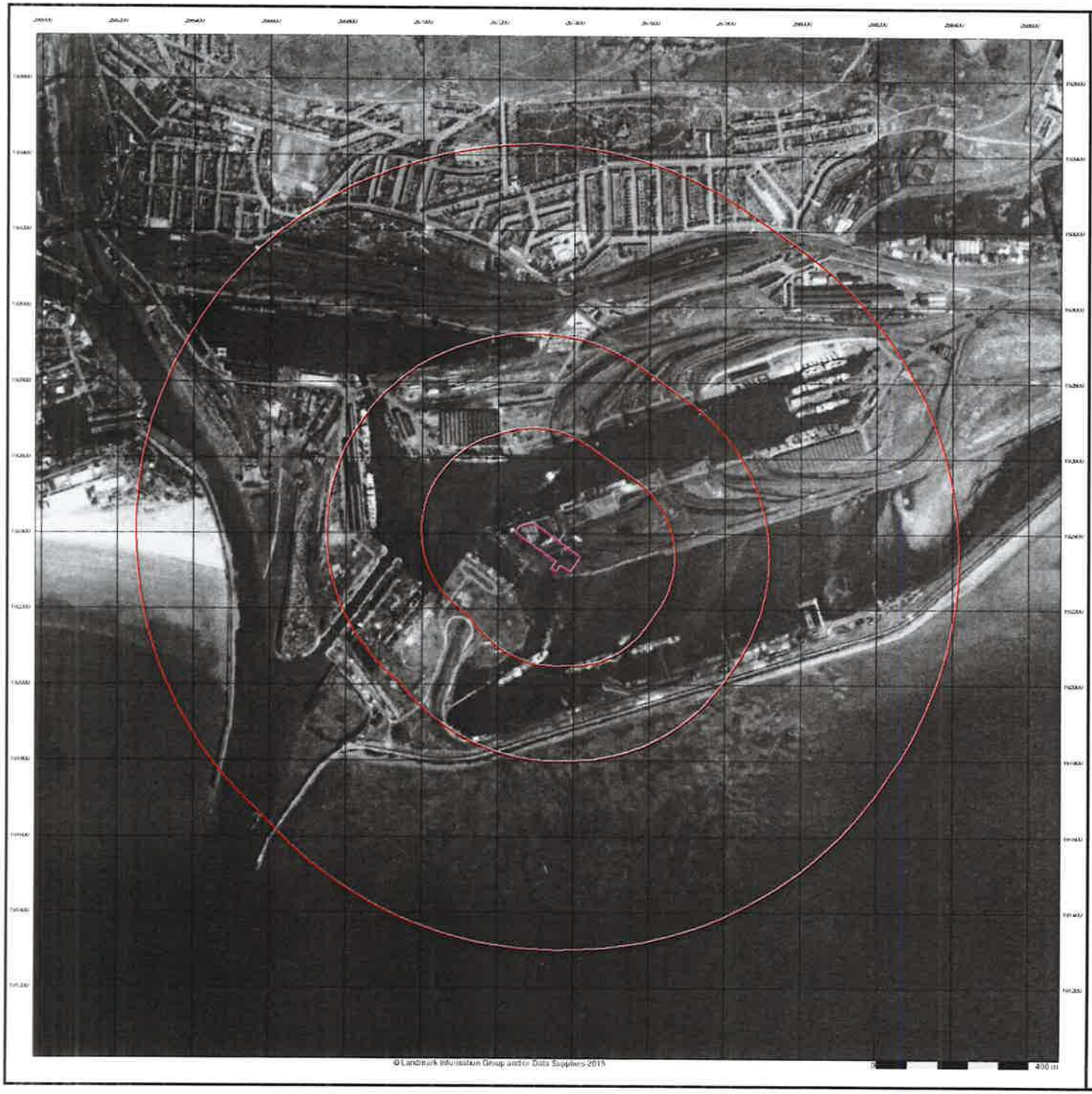


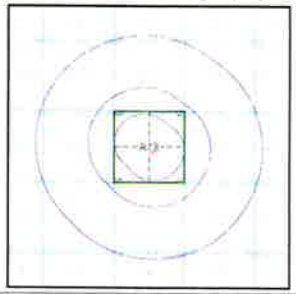
EAME
Earth & Marine Environmental Consultants

Historical Aerial Photography
Published 1949
Source map scale - 1:10,560

The Historical Aerial Photos were produced by the Ordnance Survey at a scale of 1:1,250 and 1:10,560 from Air Force photography. They were produced between 1944 and 1951 as an interim measure, pending preparation of conventional mapping, due to post war resource shortages. New security measures in the 1950's meant that every photograph was re-checked for potentially unsafe information with security sites replaced by fake fields or clouds. The original editions were withdrawn and only later made available after a period of fifty years although due to the accuracy of the editing, without viewing both revisions it is not easy to spot the edits. Where available Landmark have included both revisions.

Map Name(s) and Date(s)

Historical Aerial Photography - Slice A



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Site Details

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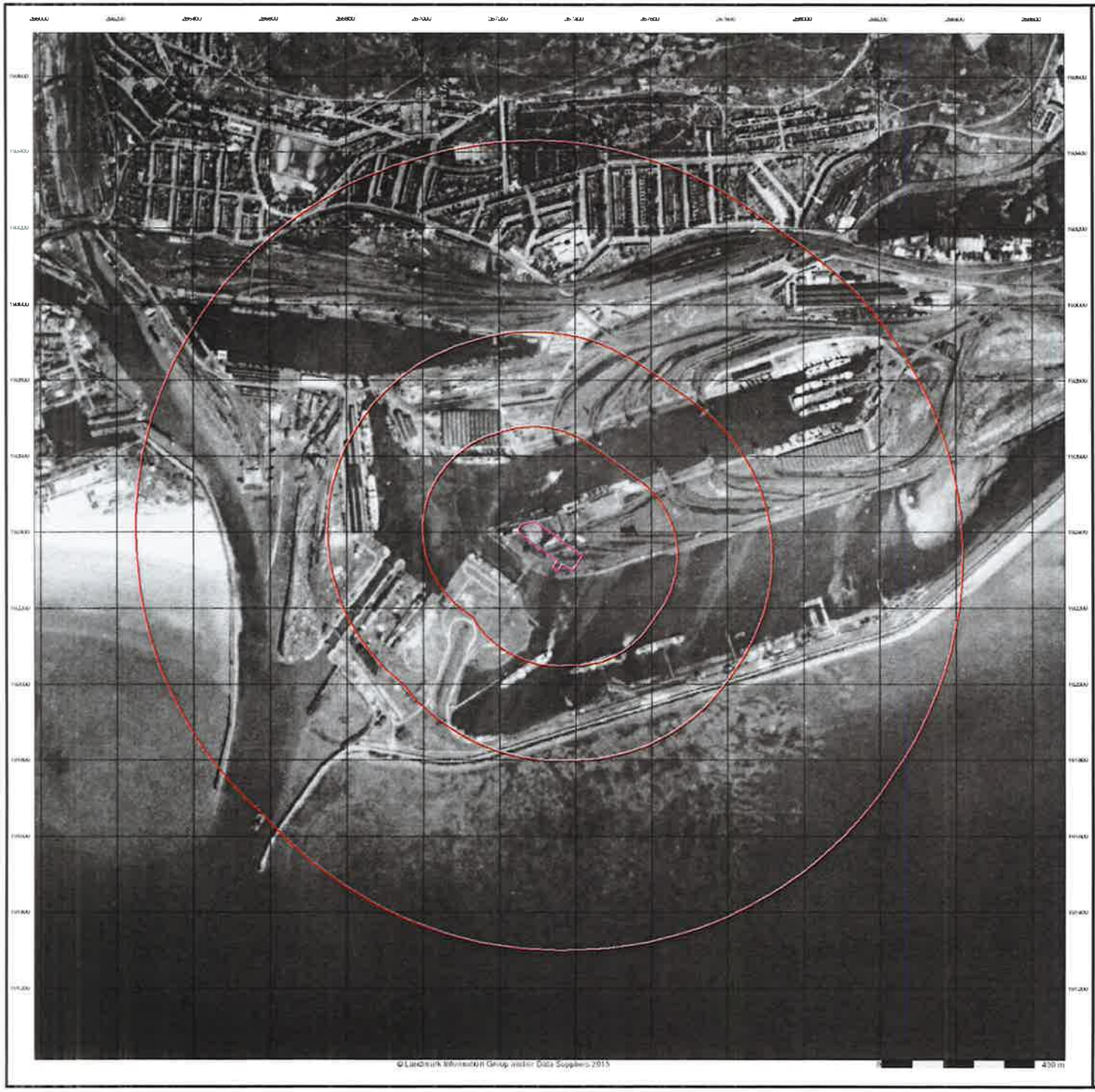

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Published 1949
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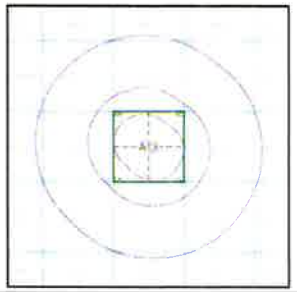
Map Name(s) and Date(s)

Historical Aerial Photography - Slice A



BRITISH LIBRARY

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Site Details

Site at, Swansea Bay, Swansea

Landmark INFORMATION GROUP
Tel: 0844 844 9952
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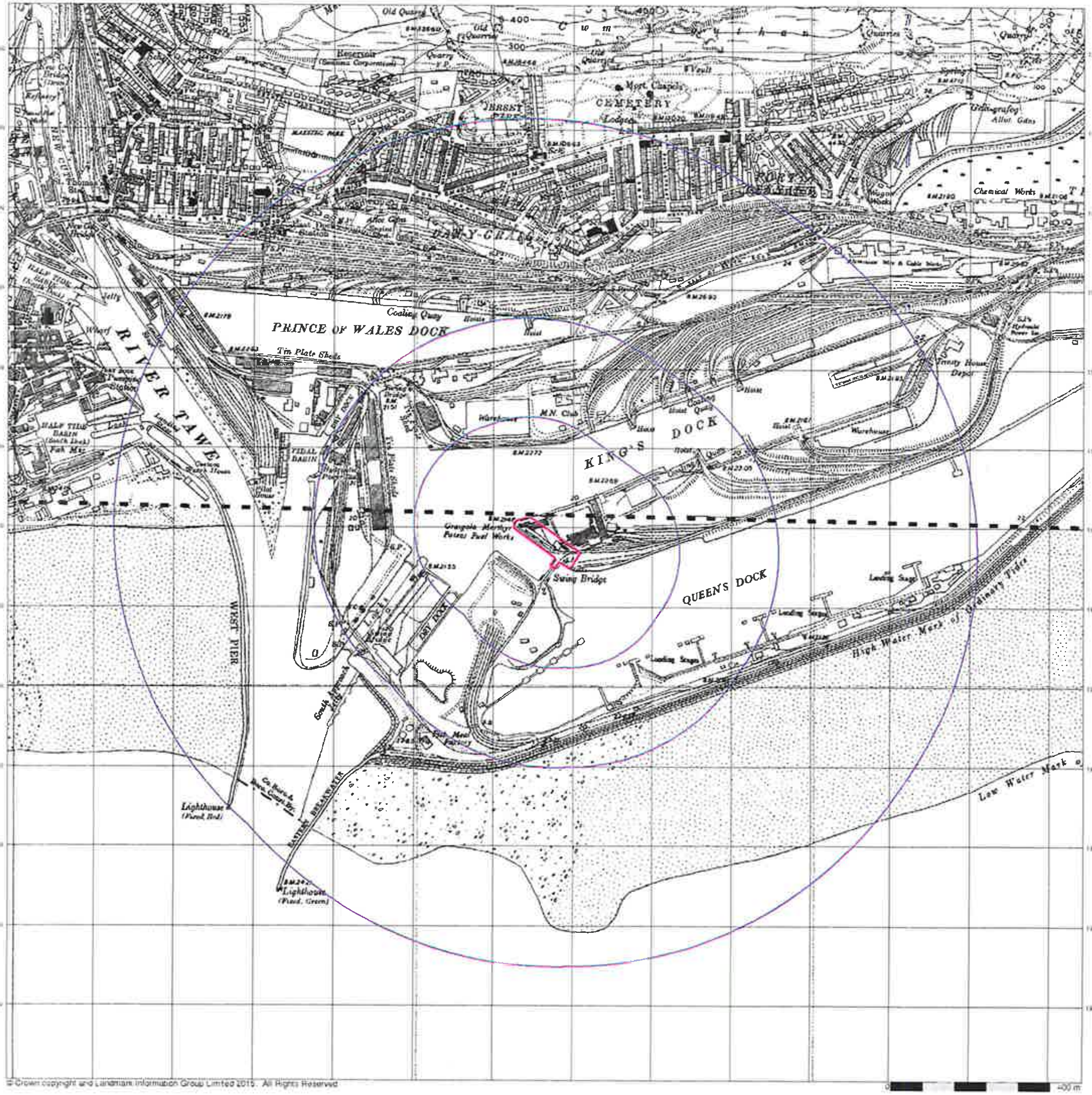
Web: www.environcheck.co.uk



EAME
Earth & Marine Environmental Consultants

Glamorganshire
Published 1951
Source map scale - 1:10,560

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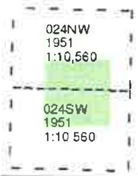
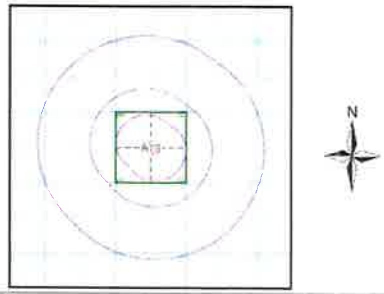
Map Name(s) and Date(s)



Historical Map - Slice A



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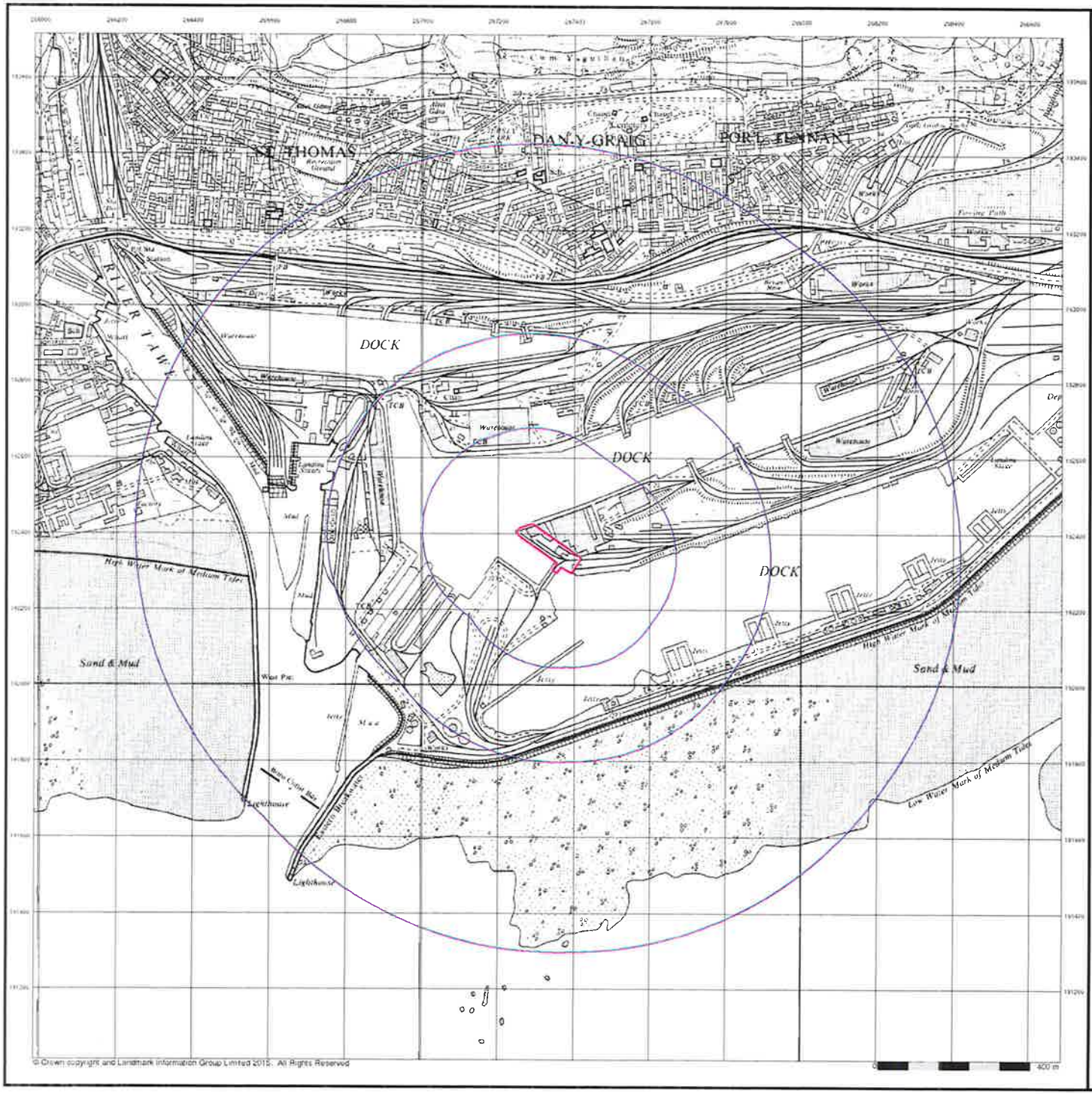

EAME
Earth & Marine Environmental Consultants

Ordnance Survey Plan
Published 1964
Source map scale - 1:10,000

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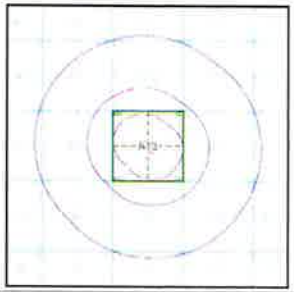
Map Name(s) and Date(s)

Historical Map - Slice A



Order Details

Order Number:	138065595_1_1
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National Grid Reference:	267330, 192360
Slice:	A
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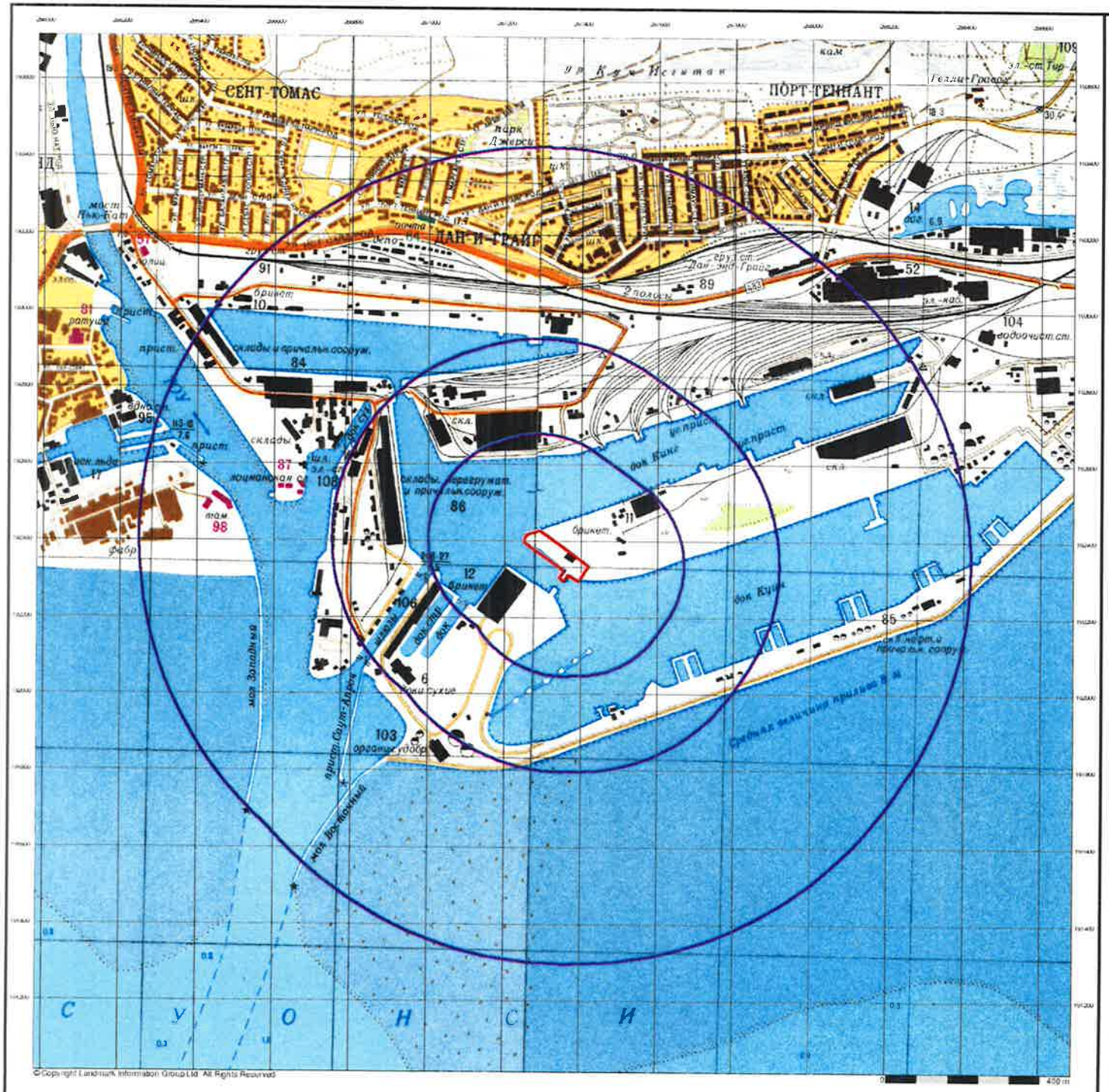
Search Buffer (m):	1000

Site Details

Site at, Swansea Bay, Swansea



EAME
Earth & Marine Environmental Consultants

Swansea

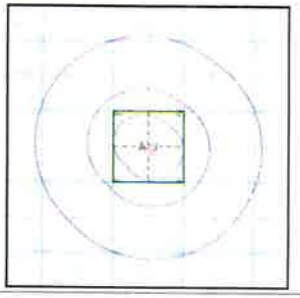
Published 1976

Source map scale - 1:10,000

These maps were produced by the Russian military during the Cold War between 1950 and 1997, and cover 103 towns and cities throughout the U.K. The maps are produced at 1:25,000, 1:10,000 and 1:5,000 scale, and show detailed land use, with colour-coded areas for development, green areas, and non-developed areas. Buildings are coloured black and important building uses (such as hospitals, post offices, factories etc.) are numbered, with a numbered key describing their use.
They were produced by the Russians for the benefit of navigation, as well as strategic military sites and transport hubs, for use if they were to have invaded the U.K. The detailed information provided indicates that the areas were surveyed using land-based personnel, on the ground, in the cities that are mapped.

Map Name(s) and Date(s)

Russian Map - Slice A



Order Details

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Slice:	A
Site Area (Ha):	0.86
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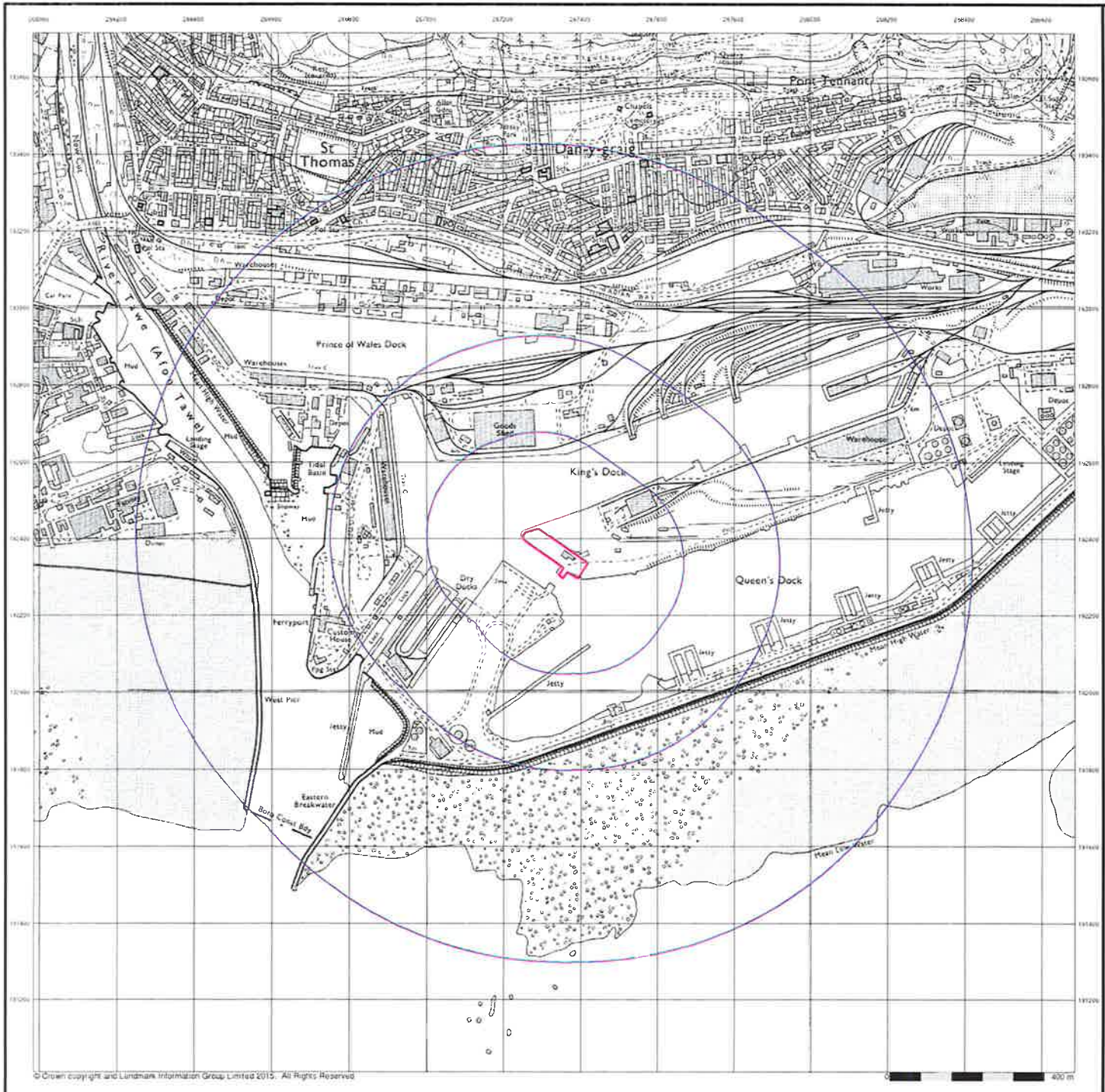
Site Details

Site at, Swansea Bay, Swansea



EAME
Earth & Marine Environmental Consultants

Ordnance Survey Plan
Published 1979
Source map scale - 1:10,000

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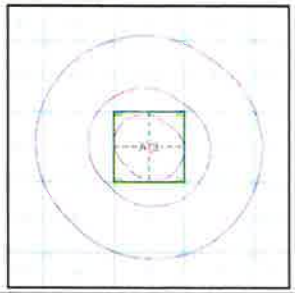
Map Name(s) and Date(s)

Historical Map - Slice A



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Site Details

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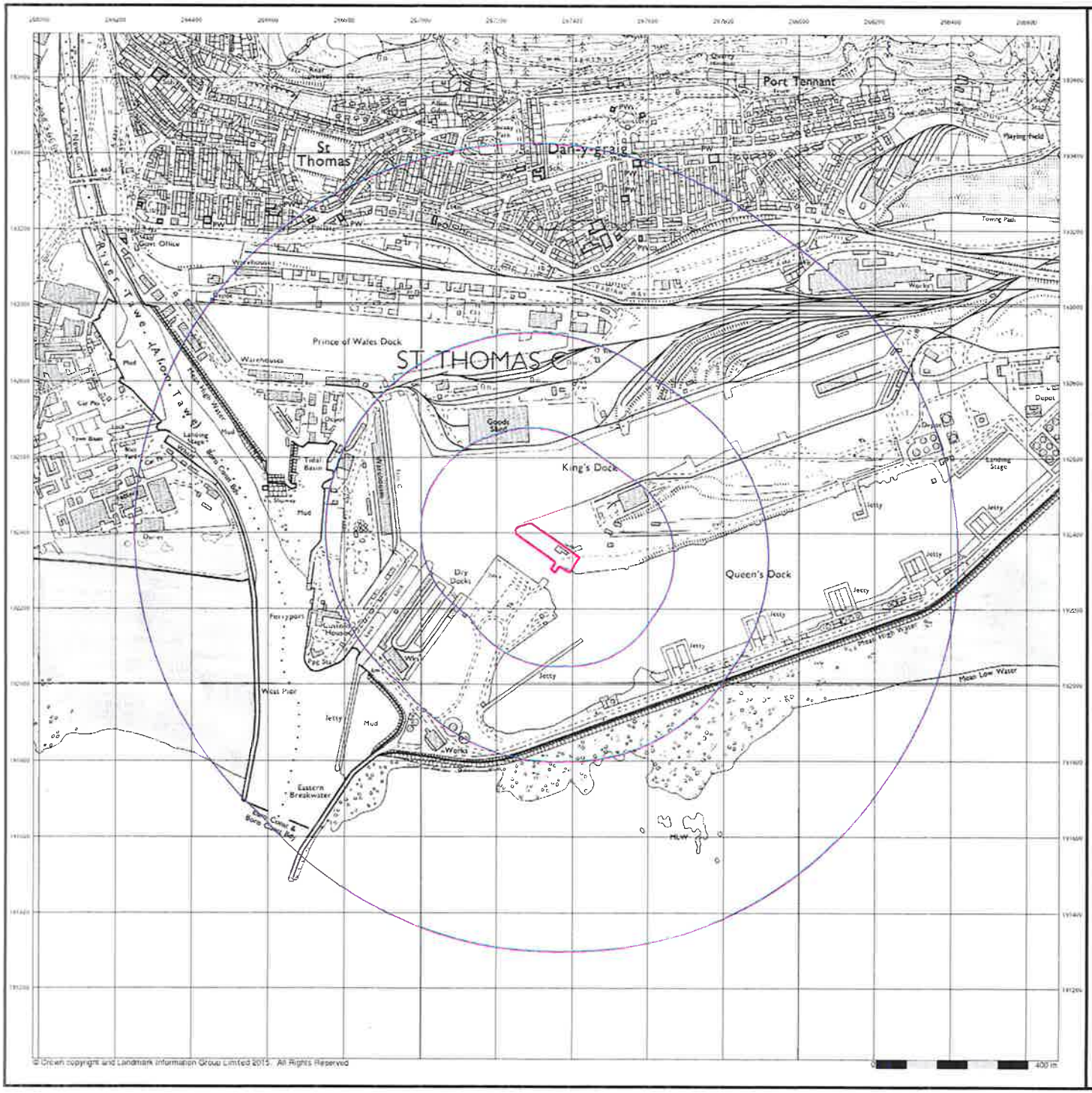

EAME
Earth & Marine Environmental Consultants

Ordnance Survey Plan
Published 1989
Source map scale - 1:10,000

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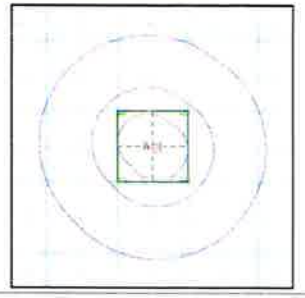
Map Name(s) and Date(s)

Historical Map - Slice A



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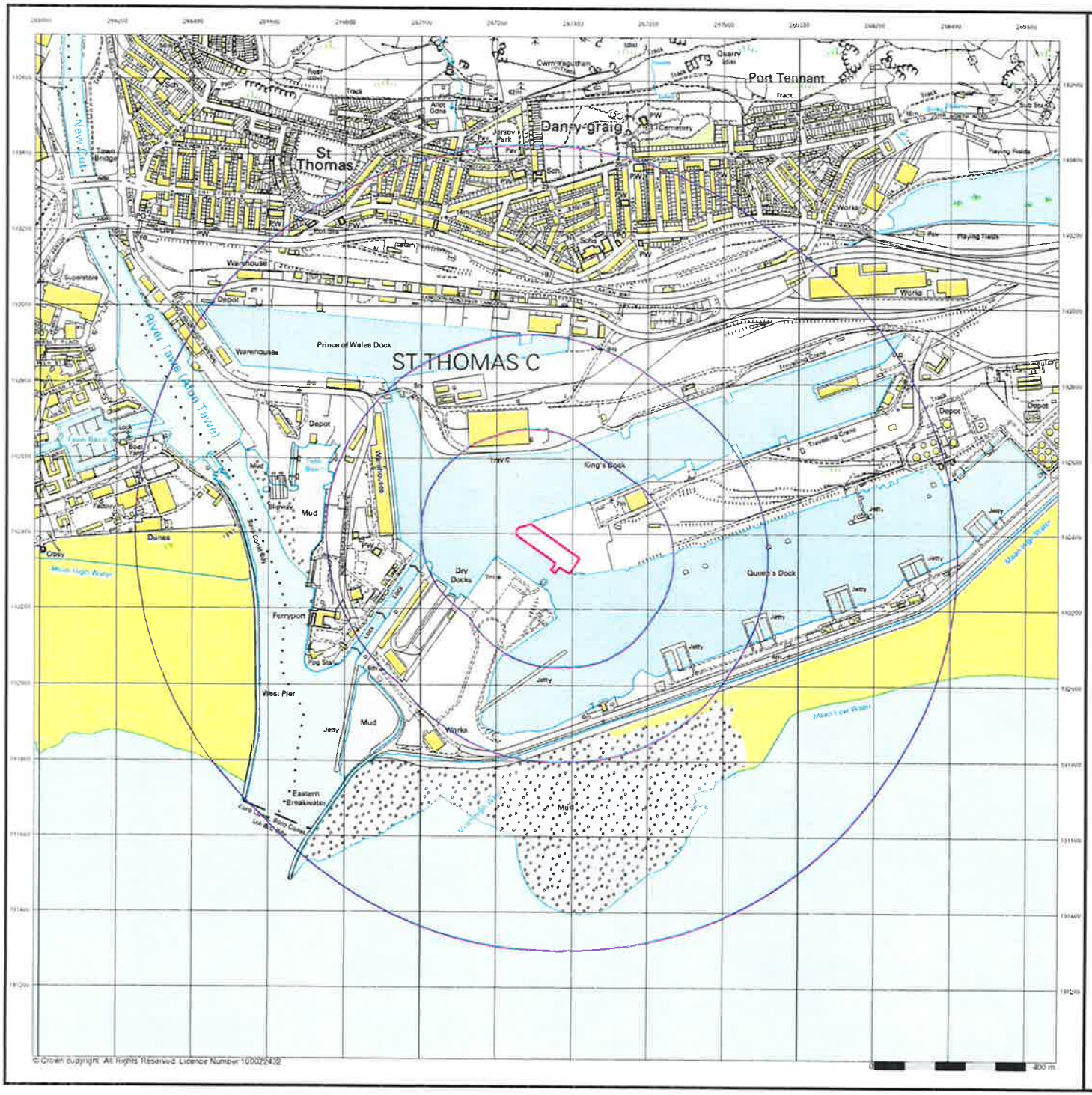
Search Buffer (m):	1000

Site Details

Site at, Swansea Bay, Swansea



EAME
Earth & Marine Environmental Consultants

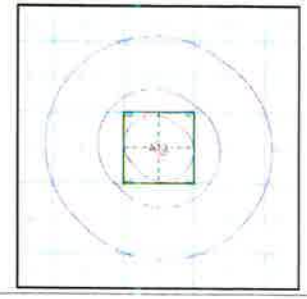
10k Raster Mapping
Published 1999
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)

SS69SE
1999
1:10 000

Historical Map - Slice A



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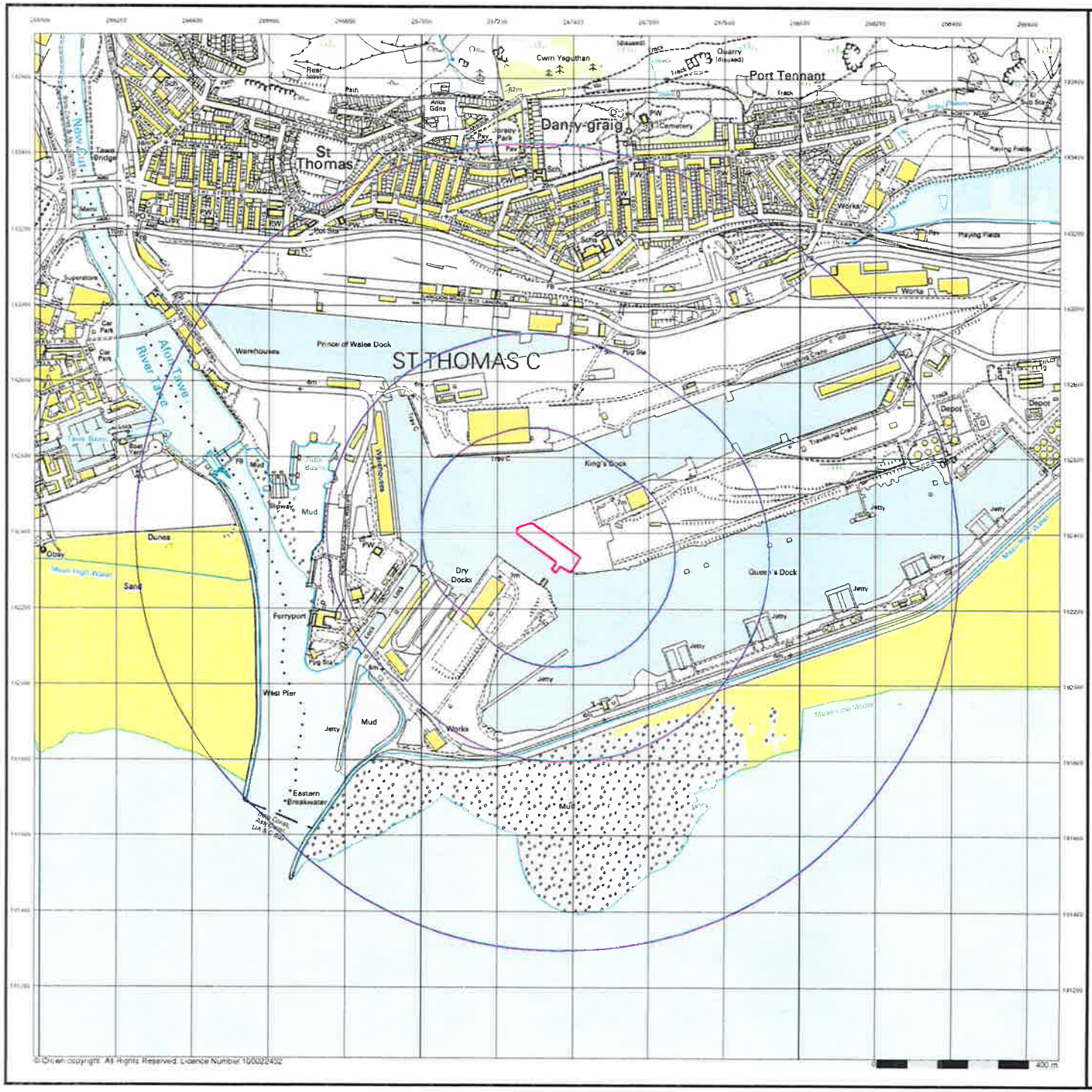


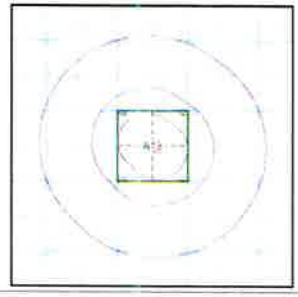
EAME
Earth & Marine Environmental Consultants

10k Raster Mapping
Published 2006
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)

Historical Map - Slice A



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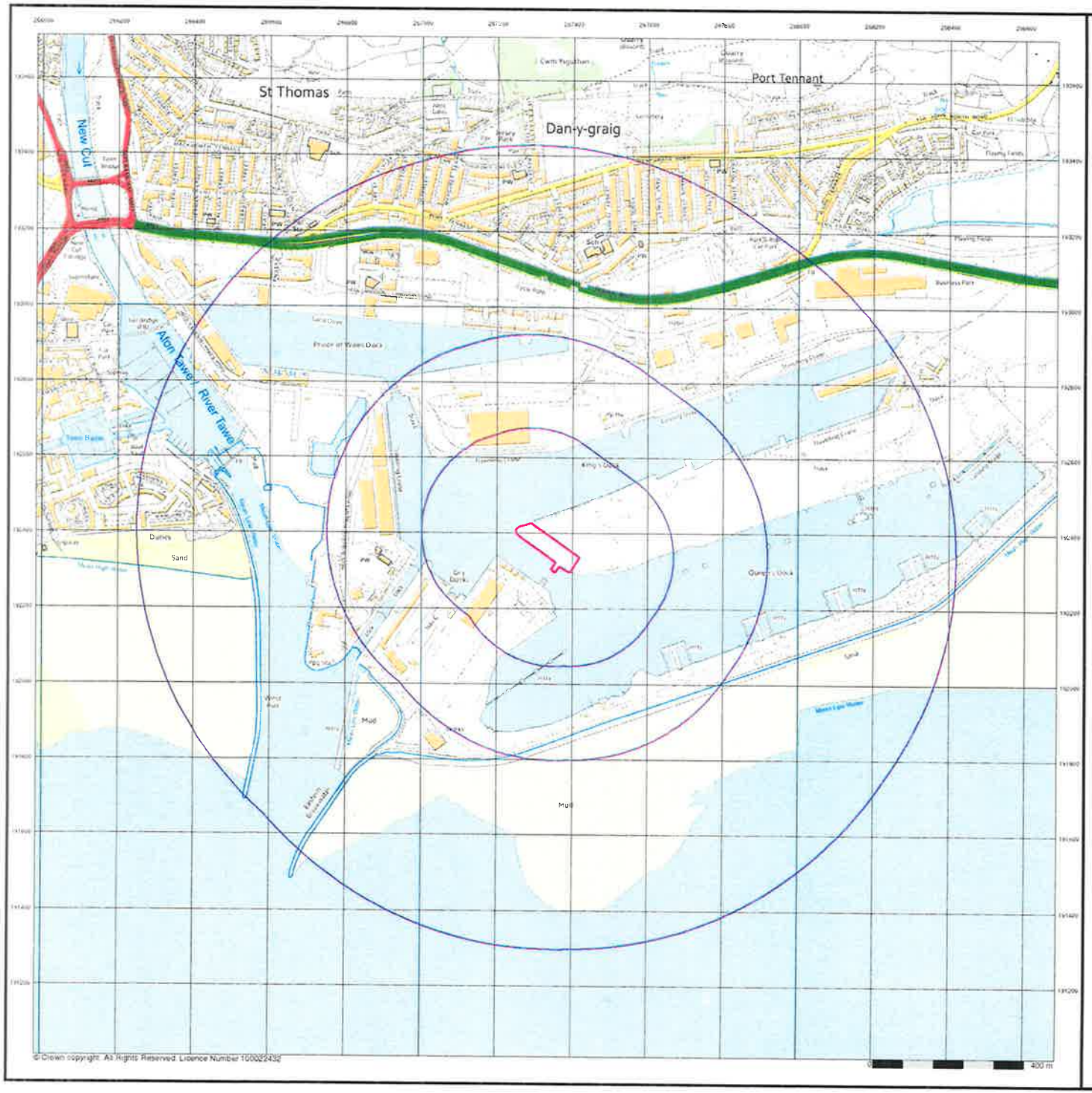


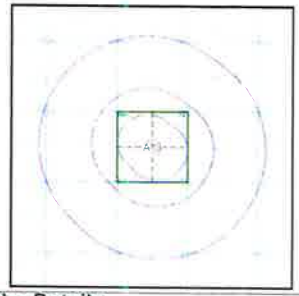
EAME
Earth & Marine Environmental Consultants

VectorMap Local
Published 2017
Source map scale - 1:10,000

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities),1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

Map Name(s) and Date(s)

Historical Map - Slice A



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Site Details

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EXPLANATION OF SIGNS
USED ON
INSURANCE PLANS OF TOWNS & CITIES

CHAS. E. GOAD, LTD. CIVIL ENGINEERS — 56 CROUCH HILL LONDON N 4.

ABBREVIATIONS

ASB.	ASBESTOS
CORR.	CORRUGATED IRON
D.I.D.	DOUBLE IRON DOORS
DRA.	DRAPERY
D.	DWELLING
ELECT.	ELECTRICIAN
(E.M.)	ELECTRIC MOTORS
(ENG.)	STEAM ENGINE
FURNE.	FURNITURE
GAR.	GARAGE
(G.E.)	GAS ENGINE
H.W.	HARDWARE
I.COLS.	IRON COLUMNS OR STEEL STANCHIONS
JWLY.	JEWELLERY
M.Cl.	METAL CLAD
M.W.	MANCHESTER WAREHOUSE
M.L.	MATCH (OR WOOD) LINED
OIL.	OIL & COLOR
(O.E.)	OIL ENGINE
P.H.	PUBLIC HOUSE
S.	SHOP
S.I.D.	SINGLE IRON DOORS
S.I.S.	SINGLE IRON SHUTTERS
TAI.	TAILORS
TENS.	TENEMENTS
W.G.	WIRED GLASS
W.N.	WIRE NETTING OVER GLASS

COLORS

- BRICK, STONE OR CONCRETE
- WOOD
- AREAS CLEARED DUE TO ENEMY ACTION
- SKYLIGHTS ON 1 & 2 STORY BUILDINGS
- SKYLIGHTS ON HIGHER BUILDINGS
- METAL BUILDINGS
- TIMBER PILED OR STACKED

WALLS

- PARTY WALL 2 STORIES OR OVER, A PROBABLE FIRE CUT OFF
- ENTIRE WALL, BUT DOUBTFUL AS FIRE CUT OFF
- DEFECTIVE WALL — IMPERFECT
- WALL ABOVE, IRON COLS: UNDER
- WALL SOME FLOORS ONLY (OR WOOD OR PLASTER PARTITION)
- ABOVE ROOF 6" TO 1'6"
- —Do— 1'6" TO 2'6"
- M.L. MATCH OR WOOD LINED
- WOOD CLAD WITH CORRUGATED IRON

OPENINGS

- PASSAGE UNDER
- ON ALL FLOORS
- SOME FLOORS ONLY } UNPROTECTED
- ALL FLOORS (PROTECTED)
- ALL FLOORS (SOME PROTECTED) } SINGLE IRON DOORS
- SOME FLOORS ONLY (PROTECTED)
- ALL FLOORS (SOME PROTECTED)
- ALL FLOORS (PROTECTED) } DOUBLE IRON DOORS
- SOME FLOORS ONLY (PROTECTED)
- WOOD LOADING DOOR
- IRON LOADING DOOR

WINDOWS

- ON ALL OR MOST FLOORS
- MORE THAN USUAL
- OVERLOOKING
- NEARLY ALL GLASS } UNPROTECTED
- OPENINGS THRO' & WINDOWS OVER
- ON SOME FLOORS ONLY
- PROTECTED BY WIRED GLASS
- PROTECTED BY SINGLE IRON SHUTTERS
- PROTECTED BY DOUBLE IRON SHUTTERS

WINDOWS IN FRONT & REAR OF BUILDINGS UNDERSTOOD UNLESS OTHERWISE SHOWN

FLOORS

1, 2, 3, 3½ & ½ ON BUILDINGS ARE NUMBER OF STORIES ABOVE GROUND (3½=3 FLOORS & ATTIC)

2 & 2 B MEANS 2 STORIES & 2 BASEMENTS BASE & SUB-BASEMENT.

SKYLIGHTS

- LESS THAN 50 SQUARE FEET (SAY 10'x5', OR 7'x7')
- OPENINGS THROUGH 2 FLOORS UNDER (EACH STROKE DENOTES AN OPENING)
- WITH WELL HOLE THROUGH 3 FLOORS
- LANT. LANTERN LIGHT, SIDES ONLY GLASS OR VENT OR RAISED VENTILATOR } OVER 50 SQ: FT TO SCALE

HOISTS & LIFTS

- H OPEN
- H OPEN (WOOD FLAPS TO FLOORS)
- H ENCLOSED WOOD OR PLASTER
- H OPEN TO STREET
- H ENCLOSED BRICK OR FIRE RESISTING WIRED GLASS DOORS

IRON DOORS SHOWN AS EXPLAINED UNDER "OPENINGS"

ROOFS

ASB	ASBESTOS
C	CONCRETE
CORR	CORRUGATED IRON
⌐	METAL
P	PATENT (FELT &c)
◇	SLATE
T	TILE

PROFILES

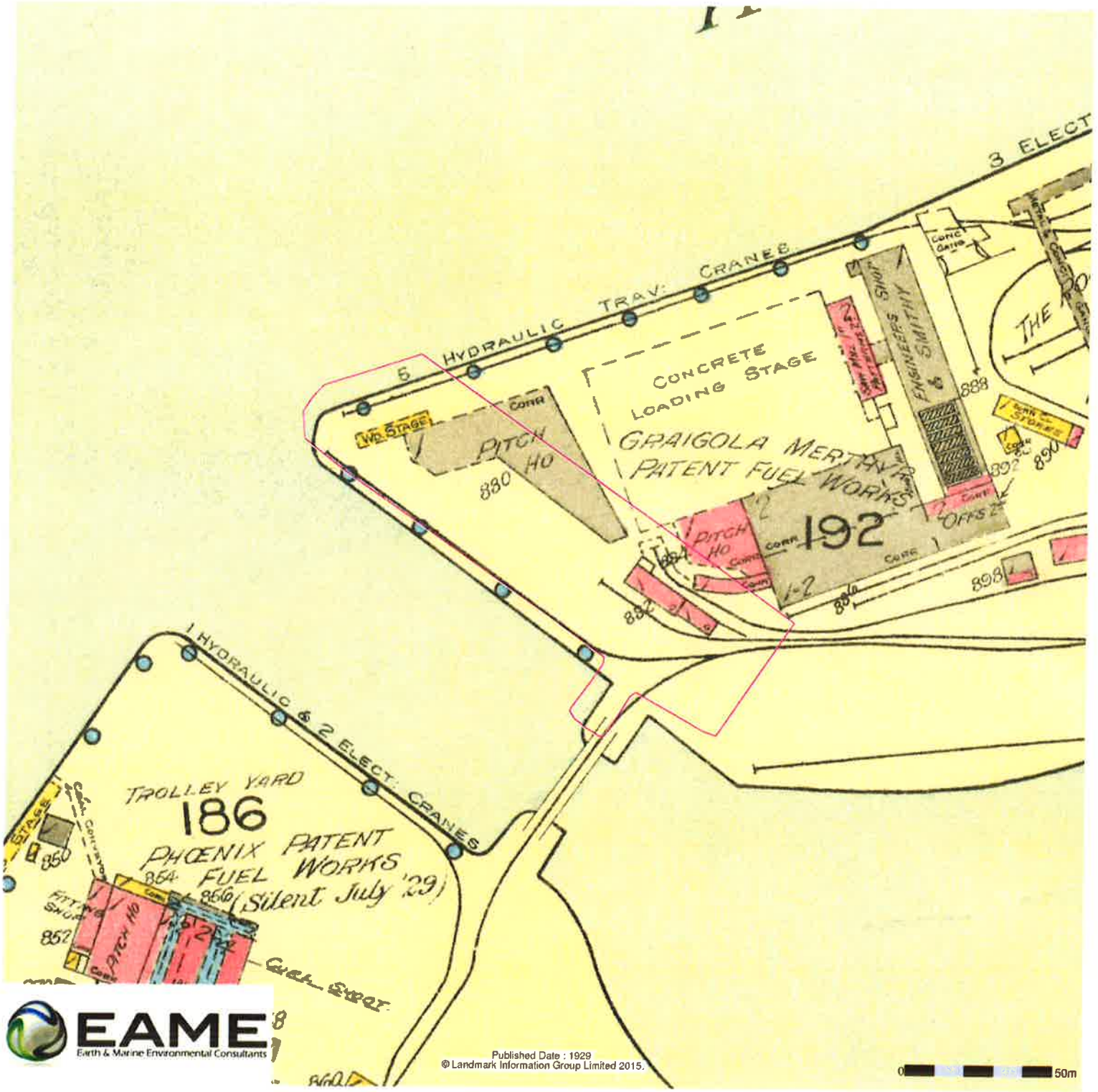
WITH NORTH LIGHTS

SUNDRIES

- STEAM BOILERS
- —B— BOILER SET IN BRICK
- FACTORY CHIMNEYS
- (ENG.) STEAM ENGINE
- OVERHANGING WOOD CORNICE
- FIRE ALARM BOX
- —— Do —— ON KEY PLAN
- HYDRANT
- HYDRAULIC HYDRANT
- PRIVATE HYDRANT OR STAND PIPE
- DOUBLE HYDRANT
- SALT WATER HYDRANT
- SPRINKLER OR AUTO ALARM BELL

REFERENCE NUMBERS

- NUMBERS PARALLEL WITH STREET ARE EXISTING STREET Nos
- 20 WHERE TWO SETS OF STREET Nos IN SAME BLOCK COINCIDE, ADDITIONAL ARBITRARY Nos ARE GIVEN TO ONE SET (500 & UPWARDS)
- WHERE BUILDINGS TO WHICH THEY APPLIED ARE DEMOLISHED, STREET & ARBITRARY Nos ARE SHOWN & CROSSED THROUGH ON REVISION
- —48'— (37) ARE STREET WIDTHS. ARE HEIGHTS OF GROUND ABOVE ORDNANCE DATUM
- HEIGHT IN FEET OF ADJOINING BUILDINGS WHERE STORIES DIFFER IN HEIGHT
- 6" 12" SIZES OF WATER MAINS SUPPLYING HYDRANTS



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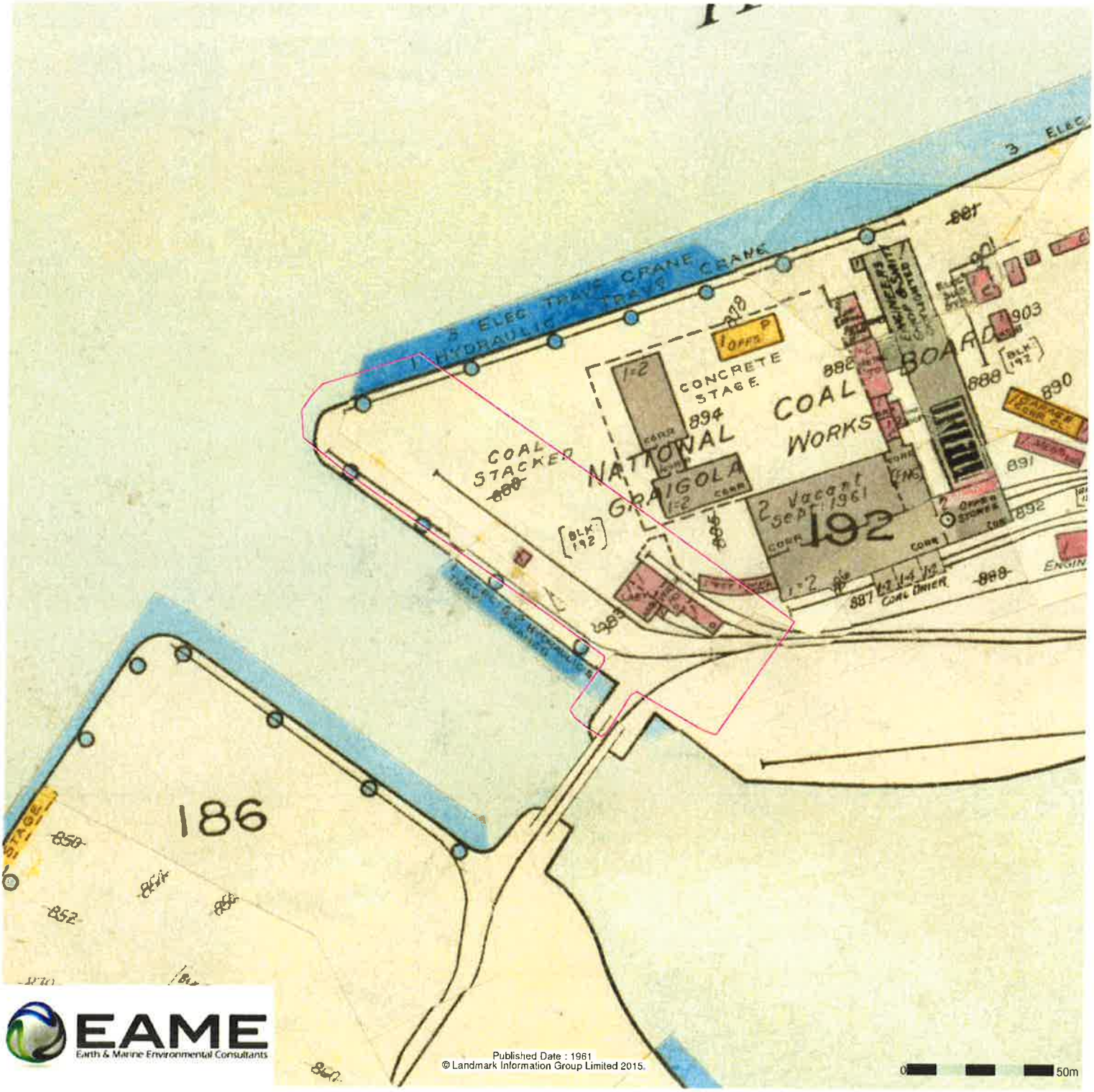

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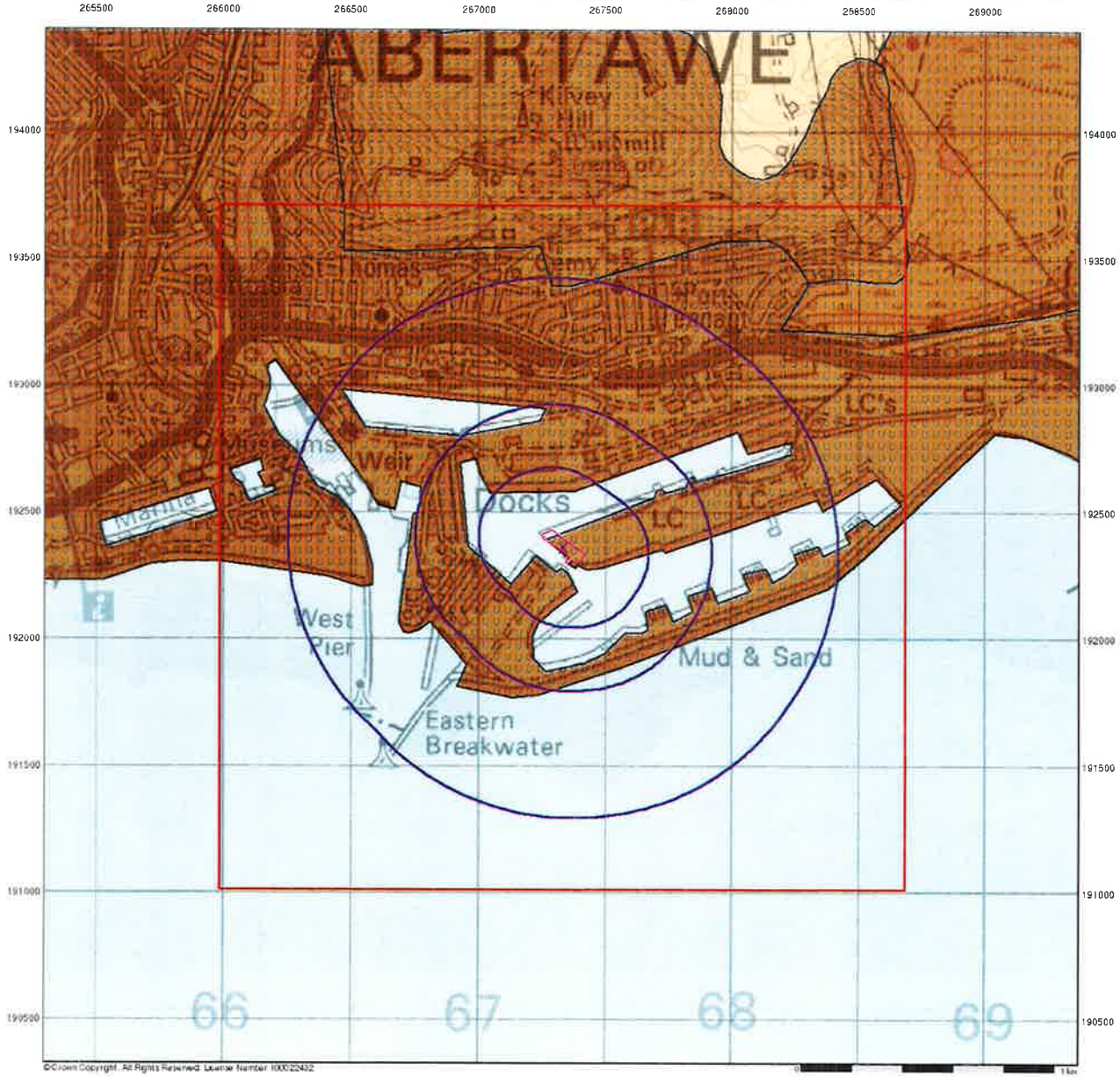
Annex C: Environmental Database



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Groundwater Vulnerability

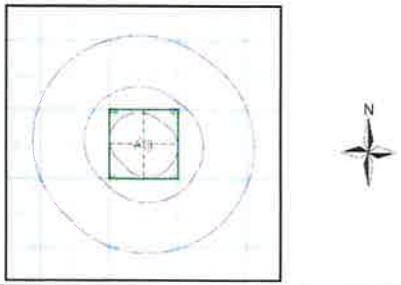
General

Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Agency and Hydrological

Geological Classes	Soil Classes
Major Aquifer (Highly Permeable)	High (H) 1, 2, 3, U
	Intermediate (I) 1, 2
	Low
Minor Aquifer (Variably Permeable)	High (H) 1, 2, 3, U
	Intermediate (I) 1, 2
	Low
Non Aquifer (Negligibly Permeable)	
Water or Sea	
Drift Deposit	

Site Sensitivity Context Map - Slice A



Order Details

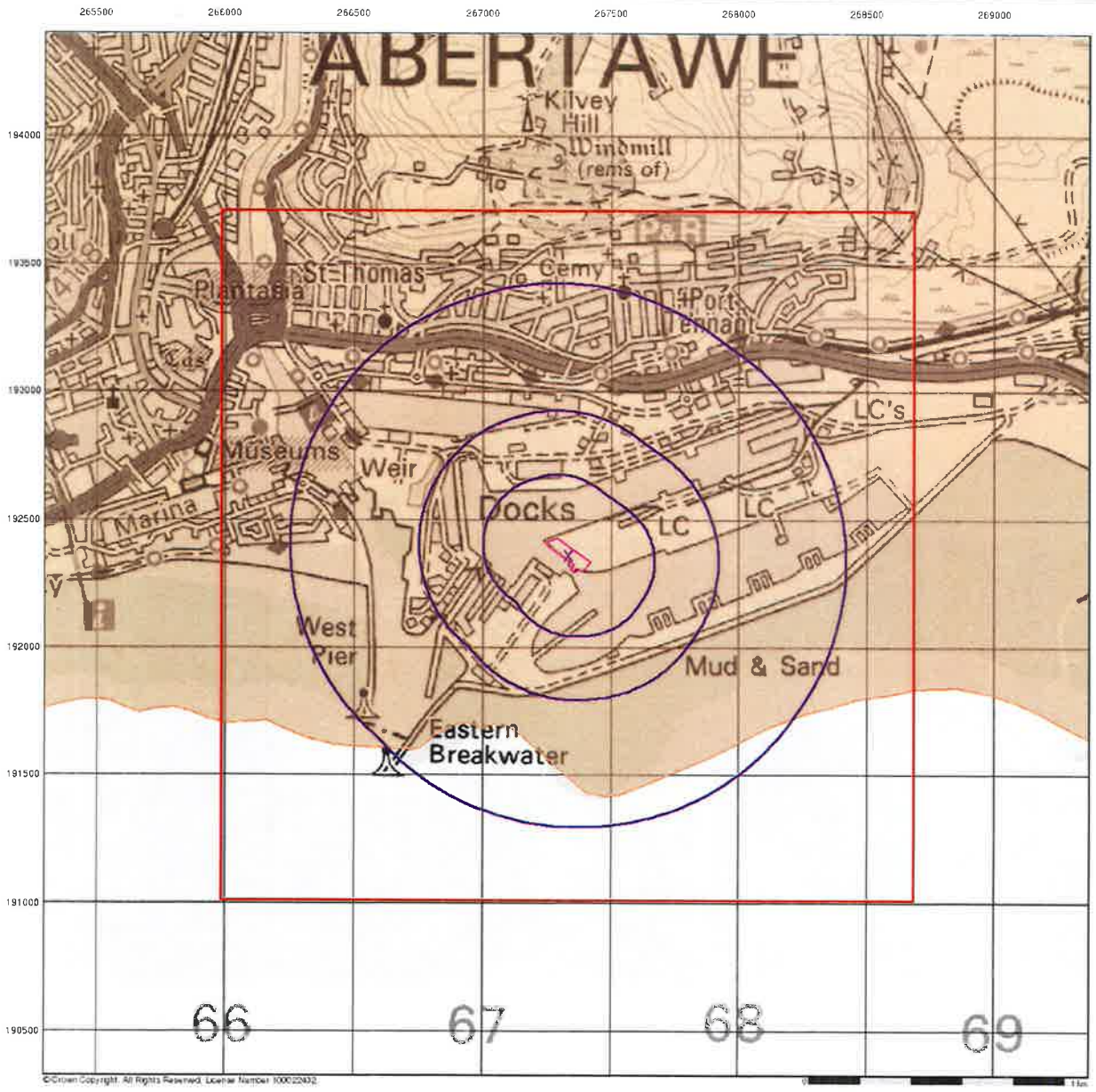
Order Number:	138065595_1_1
Customer Ref:	017-1569
National Grid Reference:	267330, 192360
Slice:	A
Site Area (Ha):	0.86
Search Buffer (m):	1000

Site Details

Site at, Swansea Bay, Swansea

Landmark INFORMATION GROUP

Tel [redacted]
Fax [redacted]
Web www.emeb.co.uk



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Bedrock Aquifer Designation

General

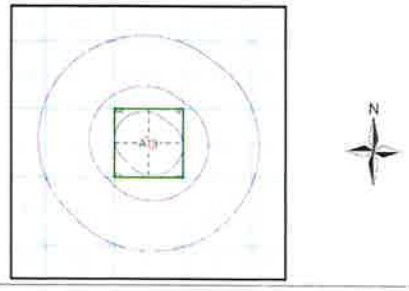
Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



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Customer Ref:	017-1569
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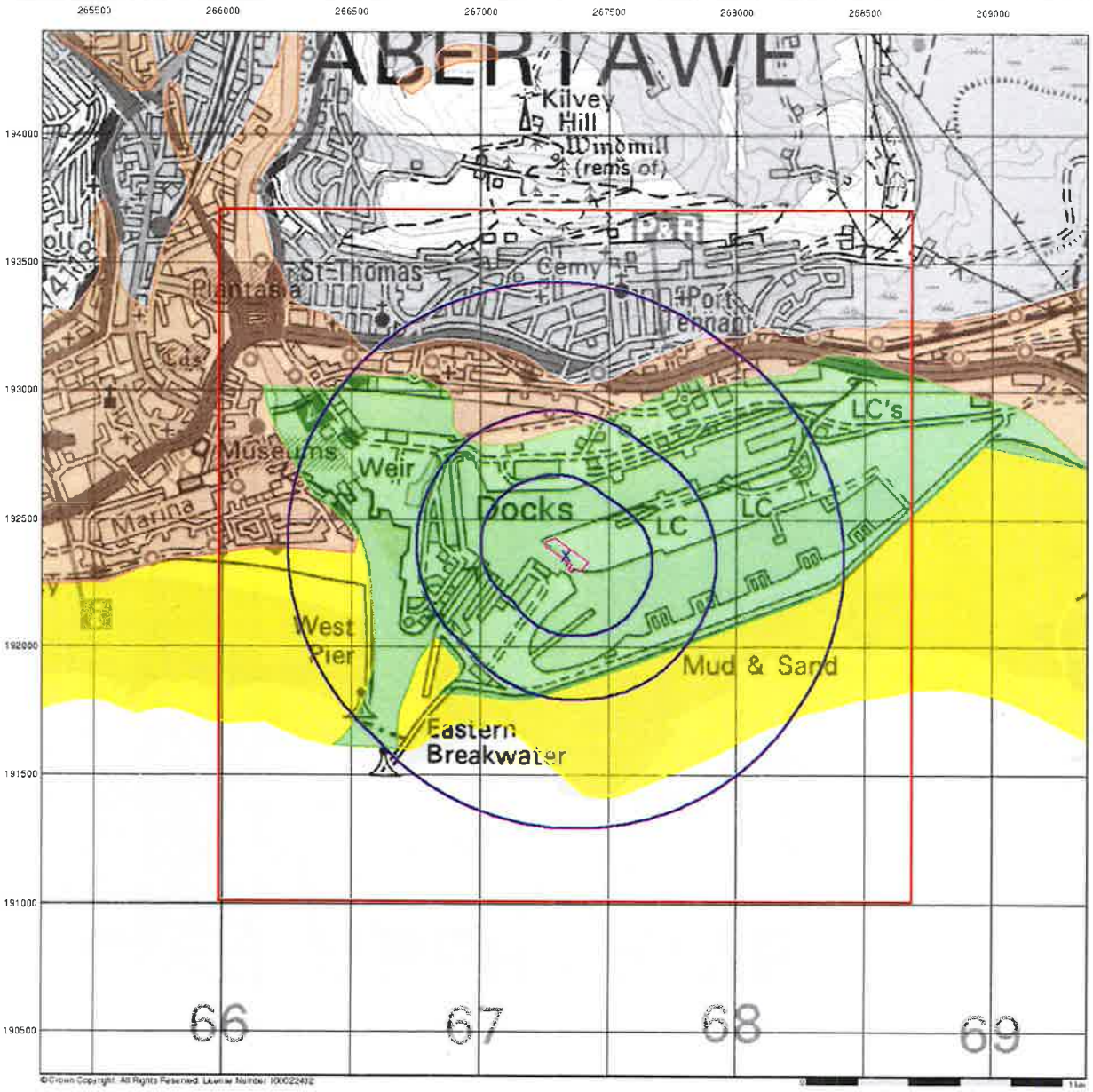
Slice:	A
Site Area (Ha):	0.86
Search Buffer (m):	1000

Site Details

Site at, Swansea Bay, Swansea



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Superficial Aquifer Designation

General

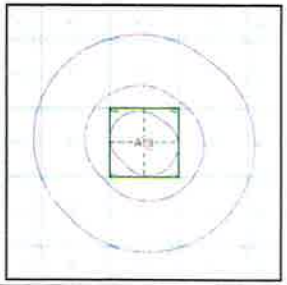
Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



Order Details

Order Number:	138065595_1_1
Customer Ref:	017-1569
National Grid Reference:	267330, 192360
Slice:	A
Site Area (Ha):	0.86
Search Buffer (m):	1000

Site Details

Site at, Swansea Bay, Swansea

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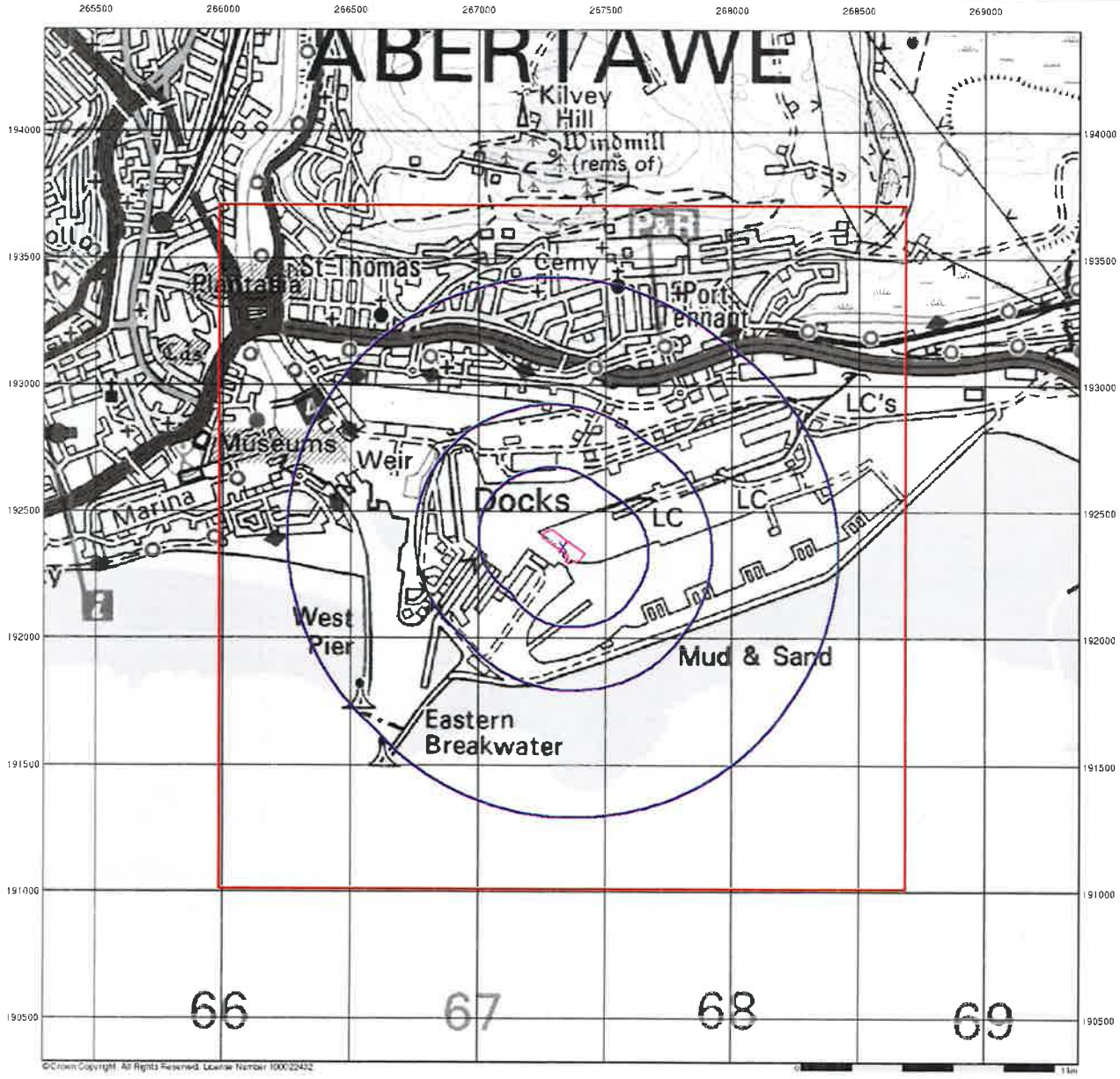

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Source Protection Zones

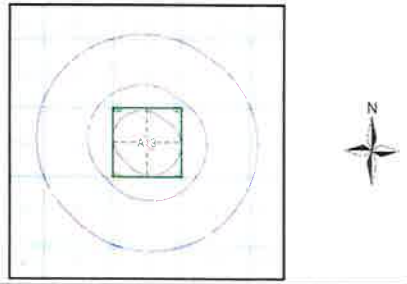
General

Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Agency and Hydrological

- Inner zone (Zone 1)
- Inner zone - subsurface activity only (Zone 1c)
- Outer zone (Zone 2)
- Outer zone - subsurface activity only (Zone 2c)
- Total catchment (Zone 3)
- Total catchment - subsurface activity only (Zone 3c)
- Special interest (Zone 4)
- Source Protection Zone Borehole

Site Sensitivity Context Map - Slice A



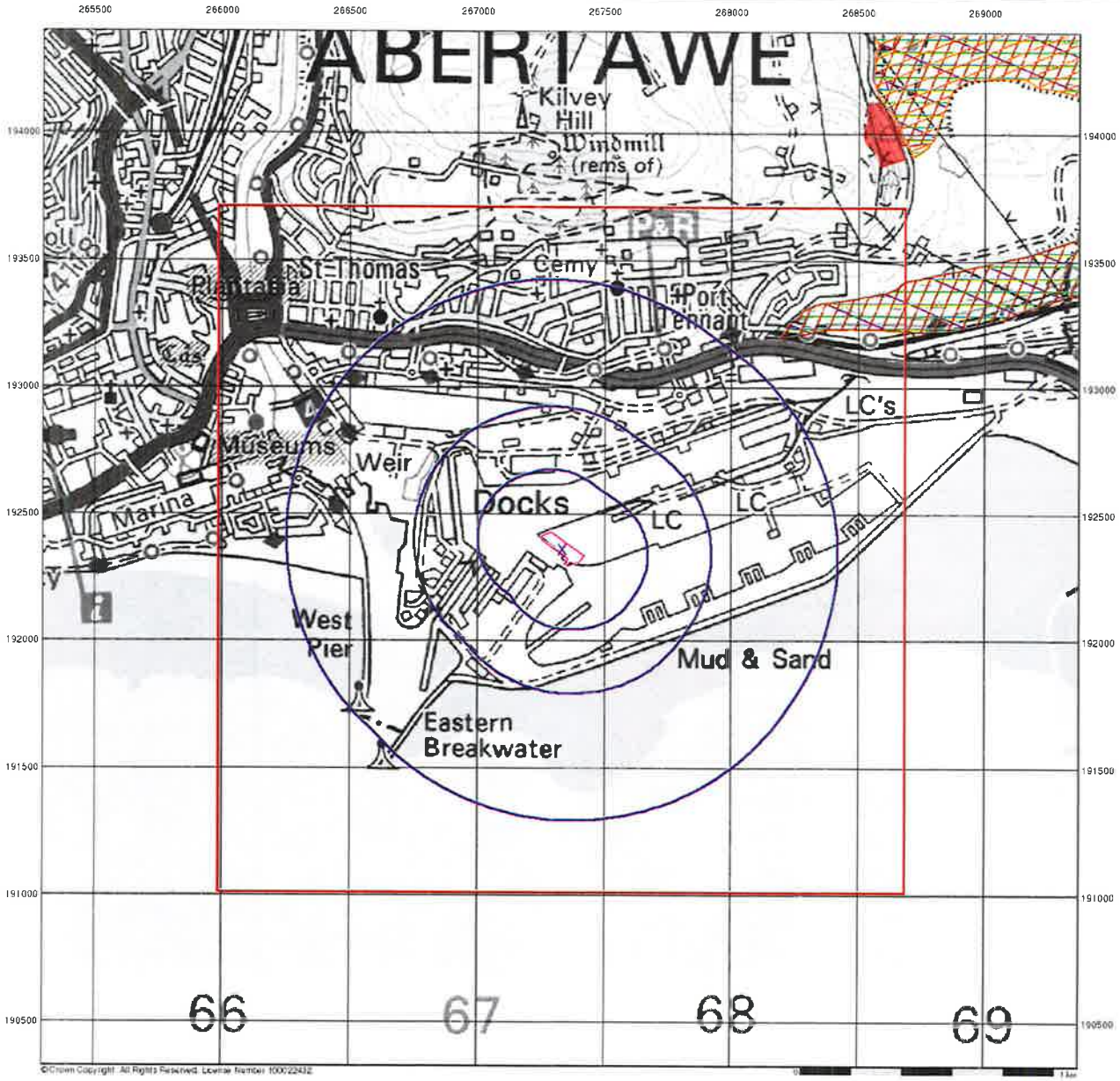
Order Details

Order Number:	138065595_1_1
Customer Ref:	017-1569
National Grid Reference:	267330, 192360
Slice:	A
Site Area (Ha):	0.86
Search Buffer (m):	1000

Site Details

Site at, Swansea Bay, Swansea

Landmark INFORMATION GROUP
Tel 0844 844 9952
Fax 0844 844 9951
Web www.emapsite.co.uk



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Sensitive Land Uses

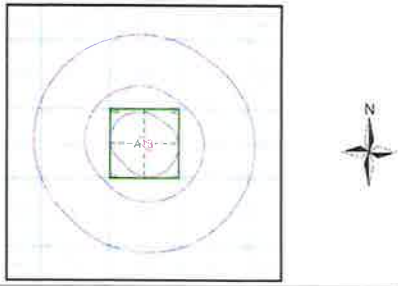
General

Specified site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Sensitive Land Uses

- Ancient Woodland
- Area of Adopted Green Belt
- Area of Unadopted Green Belt
- Area of Outstanding Natural Beauty
- Environmentally Sensitive Area
- Forest Park
- Local Nature Reserve
- Marine Nature Reserve
- National Nature Reserve
- National Park
- Nitrate Sensitive Area
- Nitrate Vulnerable Zone
- Ramsar Site
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Protection Area
- World Heritage Sites

Site Sensitivity Context Map - Slice A



Order Details

Order Number:	138065595_1_1
Customer Ref:	017-1569
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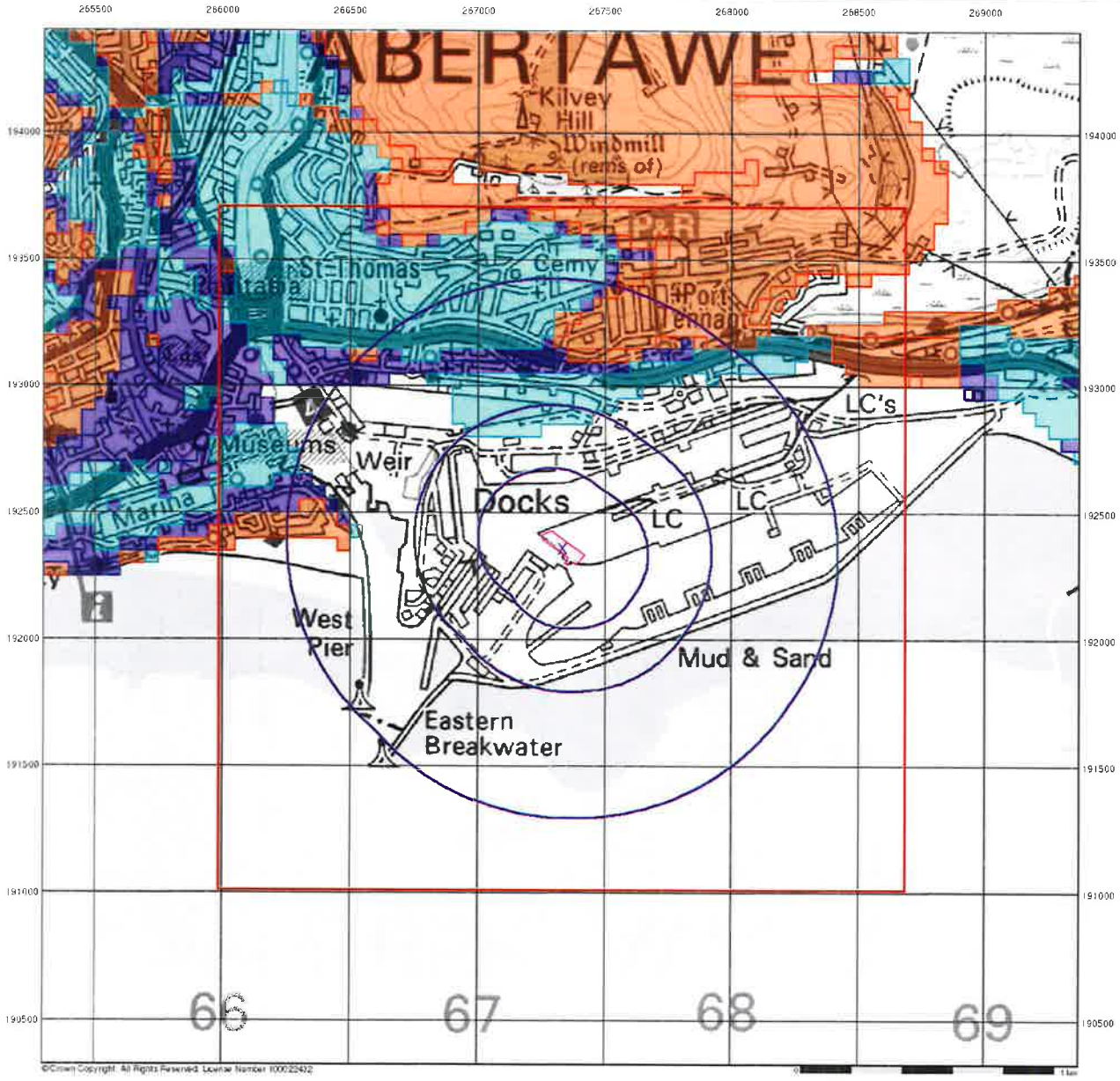
Slice:	A
Site Area (Ha):	0.86
Search Buffer (m):	1000

Site Details

Site at, Swansea Bay, Swansea



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BGS Flood GFS Data

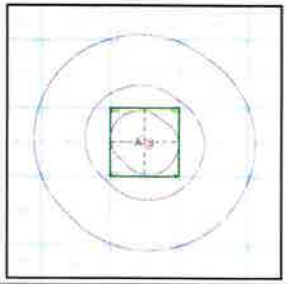
General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice

Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding to Occur
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Potential for Groundwater Flooding to Occur at Surface

Site Sensitivity Context Map - Slice A



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Order Number:	138065595_1_1
Customer Ref:	017-1569
National Grid Reference:	267330, 192360
Slice:	A
Site Area (Ha):	0.86
Search Buffer (m):	1000

Site Details

Site at, Swansea Bay, Swansea

Envirocheck® Report:

Datasheet

Order Details:

Order Number:
138065595_1_1

Customer Reference:
017-1569

National Grid Reference:
267330, 192360

Slice:
A

Site Area (Ha):
0.86

Search Buffer (m):
1000

Site Details:

Site at
Swansea Bay
Swansea

Client Details:

Mr M Sylvester
Earth and Marine Environmental
Fron Fawr Farm
Llanfairtalhaiarn
Abergele
Clwyd
LL22 8DJ

Contents

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination. For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities, and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.

In the attached datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

Report Version v53.0

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1			Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1		32	47	131
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices	pg 53				2
Integrated Pollution Controls	pg 53			3	
Integrated Pollution Prevention And Control	pg 54			1	1
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 54		2	4	7
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature		Yes			
Pollution Incidents to Controlled Waters	pg 56		1	8	9
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality	pg 59				1
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register	pg 59				1
Water Abstractions	pg 59		4		1 (*4)
Water Industry Act Referrals					
Groundwater Vulnerability	pg 61	Yes	n/a	n/a	n/a
Drift Deposits			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 62	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 62	Yes	n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences	pg 62	Yes		n/a	n/a
Flooding from Rivers or Sea without Defences	pg 62	Yes		n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 62				4

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites					
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)	pg 63		3	4	5
Local Authority Landfill Coverage	pg 65	1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)	pg 65				2
Potentially Infilled Land (Water)	pg 65	1	1	2	4
Registered Landfill Sites					
Registered Waste Transfer Sites	pg 66			1	1
Registered Waste Treatment or Disposal Sites	pg 67			1	2
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites	pg 69			1	
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents	pg 69			1	1
Planning Hazardous Substance Enforcements					

Order Number: 138065595_1_1 Date: 04-Sep-2017 rpr_ec_datasheet v53.0 A Landmark Information Group Service

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Geological					
BGS 1:625,000 Solid Geology	pg 70	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 70	Yes	Yes	Yes	Yes
BGS Recorded Mineral Sites	pg 73				4
BGS Urban Soil Chemistry	pg 74		Yes	Yes	Yes
BGS Urban Soil Chemistry Averages	pg 76	Yes			
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas	pg 76	Yes	n/a	n/a	n/a
Mining Instability	pg 76	Yes	n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards				n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 76	Yes		n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 76	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 77	Yes		n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 77	Yes		n/a	n/a
Radon Potential - Radon Affected Areas			n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a
Industrial Land Use					
Contemporary Trade Directory Entries	pg 78		1	10	50
Fuel Station Entries	pg 83				2
Points of Interest - Commercial Services	pg 83			2	12
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 84			8	18
Points of Interest - Public Infrastructure	pg 86			2	7
Points of Interest - Recreational and Environmental					
Gas Pipelines					
Underground Electrical Cables					

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Ancient Woodland					
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Order Number: 138065595_1_1 Date: 04-Sep-2017 rpr_ec_datasheet v53.0 A Landmark Information Group Service

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A18SW (N)	374	1	267250 192800
1	**Discharge Consents** Operator: Soil Fertility Dunns Ltd Property Type: Undefined Or Other Location: Soil Fertility Dunns Ltd Phoenix Wh, Phoenix Wharf Authority: Natural Resources Wales Catchment Area: Not Supplied Reference: Bl0083901 Permit Version: 1 Effective Date: 10th July 1973 Issued Date: 10th July 1973 Revocation Date: 29th December 1993 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Soakaway Nr N/W Bank Queens Do **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13SE (SE)	6	2	267400 192300
2	**Discharge Consents** Operator: J W Aquaculture Ltd Property Type: Fish Farm Location: Phoenix Wharf Kings Dock Swansea, Kings Dock Authority: Natural Resources Wales Catchment Area: Not Supplied Reference: Bp0290301 Permit Version: 1 Effective Date: 27th June 2001 Issued Date: 27th June 2001 Revocation Date: Not Supplied Discharge Type: Trade Effluent Discharge Environment: Controlled Sea Receiving Water: Kings Dock **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A13SW (SW)	60	2	267290 192280
3	**Discharge Consents** Operator: Associated British Ports Property Type: Support Services - Sea Transport Location: A Shed Toilet Block Kings Dock Swa, Kings Dock Swansea Authority: Natural Resources Wales Catchment Area: Stream 59-59 Reference: Bp0055801 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 11th January 1993 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Kings Dock **Status: Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 100m	A13SE (E)	90	2	267500 192300
4	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - Scherzer Passa Authority: Natural Resources Wales Catchment Area: Stream 59-59 Reference: Bp0055902 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 18th November 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13SW (S)	112	2	267300 192200

EAME
Agency & Hydrological

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055888 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (N)	172	2	267300 192600
5	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: Stream 59-59 Reference: Bp0055889 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (N)	172	2	267300 192600
5	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055890 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (N)	172	2	267300 192600
6	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0151358 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13SW (W)	182	2	267100 192300

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: Stream 59-59 Reference: Bp0055809 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 12th October 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	191	2	267200 192600
7	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055873 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	191	2	267200 192600
7	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055874 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	191	2	267200 192600
7	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055875 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	191	2	267200 192600

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055876 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	191	2	267200 192600
7	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055877 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	191	2	267200 192600
7	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055878 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	191	2	267200 192600
7	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055879 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	191	2	267200 192600

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055880 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	191	2	267200 192600
7	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055881 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	191	2	267200 192600
7	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055883 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	191	2	267200 192600
7	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055884 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	191	2	267200 192600

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055885 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	191	2	267200 192600
7	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055886 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	191	2	267200 192600
8	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055815 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 10th September 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NE (E)	192	2	267600 192400
9	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: Stream 59-59 Reference: Bp0055808 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 12th October 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	241	2	267100 192600

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
9	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055866 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	241	2	267100 192600
9	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055867 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	241	2	267100 192600
9	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055868 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	241	2	267100 192600
9	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055869 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	241	2	267100 192600

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
9	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055870 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	241	2	267100 192600
9	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055871 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	241	2	267100 192600
9	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055872 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	241	2	267100 192600
9	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - D Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055882 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	241	2	267100 192600

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
10	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055816 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 16th December 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13SW (SW)	251	2	267100 192200
10	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0151357 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13SW (SW)	251	2	267100 192200
11	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks Authority: Natural Resources Wales Catchment Area: Stream 59-59 Reference: Bp0151388 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 16th November 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13SW (W)	271	2	267000 192300
12	**Discharge Consents** Operator: Associated British Ports Property Type: Support Services - Sea Transport Location: A Shed Toilet Block Kings Dock Swa, Kings Dock Swansea Authority: Natural Resources Wales Catchment Area: Stream 59-59 Reference: BP0055801 Permit Version: 2 Effective Date: 12th January 1993 Issued Date: 12th October 1992 Revocation Date: Not Supplied Discharge Type: Unspecified Discharge Environment: Freshwater Stream/River Receiving Water: Kings Dock **Status: New Consent, by Application (Water Resources Act 1991, Section 88)** Positional Accuracy: Located by supplier to within 100m	A12NE (W)	311	2	266940 192390

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
12	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - A Shed Wharf Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055845 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A12NE (W)	351	2	266900 192400
13	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - A Shed Wharf Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055842 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A12SE (W)	365	2	266900 192300
13	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - A Shed Wharf Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055843 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A12SE (W)	365	2	266900 192300
13	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - A Shed Wharf Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055844 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A12SE (W)	365	2	266900 192300

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
14	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0151367 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 18th November 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A18SW (N)	382	2	267200 192800
14	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks Authority: Natural Resources Wales Catchment Area: Stream 59-59 Reference: Bp0151368 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A18SW (N)	382	2	267200 192800
14	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0151369 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 18th November 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A18SW (N)	382	2	267200 192800
15	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - C Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055853 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	382	2	267000 192700

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - C Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055854 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	382	2	267000 192700
15	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - C Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055855 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	382	2	267000 192700
15	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - C Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055856 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	382	2	267000 192700
15	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - C Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055857 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	382	2	267000 192700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - C Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055858 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	382	2	267000 192700
15	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - C Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055859 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	382	2	267000 192700
15	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - C Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055860 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	382	2	267000 192700
15	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - C Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055861 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	382	2	267000 192700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - C Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055862 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	382	2	267000 192700
15	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - C Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055863 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	382	2	267000 192700
15	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - C Shed Wharf D Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055865 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	382	2	267000 192700
16	**Discharge Consents** Operator: Associated British Ports Property Type: Domestic Property (Single) Location: National Coal Borad Laboratory, National Coal Board Laboratory, Ferry Port, Kings Dock, Swansea Authority: Natural Resources Wales Catchment Area: Stream 59-59 Reference: BP0055802 Permit Version: 2 Effective Date: 21st January 1993 Issued Date: 21st October 1992 Revocation Date: Not Supplied Discharge Type: Unspecified Discharge Environment: Controlled Sea Receiving Water: Kings Dock **Status: New Consent, by Application (Water Resources Act 1991, Section 88)** Positional Accuracy: Located by supplier to within 100m	A14NW (NE)	385	2	267700 192600

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
16	**Discharge Consents** Operator: Associated British Ports Property Type: Domestic Property (Single) Location: National Coal Borad Laboratory, National Coal Board Laboratory, Ferry Port, Kings Dock, Swansea Authority: Natural Resources Wales Catchment Area: Stream 59-59 Reference: Bp0055802 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 20th January 1993 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Kings Dock **Status: Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 100m	A14NW (NE)	385	2	267700 192600
16	**Discharge Consents** Operator: Associated British Ports Property Type: Domestic Property (Single) Location: National Coal Borad Laboratory, National Coal Board Laboratory, Ferry Port, Kings Dock, Swansea Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055839 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 18th November 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A14NW (NE)	385	2	267700 192600
17	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - B Shed Wharf Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055846 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A12NE (NW)	399	2	266900 192600
17	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - B Shed Wharf Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055847 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A12NE (NW)	399	2	266900 192600

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
17	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - B Shed Wharf Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055848 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A12NE (NW)	399	2	266900 192600
17	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - B Shed Wharf Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055849 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A12NE (NW)	399	2	266900 192600
17	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - B Shed Wharf Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055850 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A12NE (NW)	399	2	266900 192600
17	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - B Shed Wharf Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055851 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A12NE (NW)	399	2	266900 192600

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
18	**Discharge Consents** Operator: Associated British Ports Property Type: Support Services - Sea Transport Location: Swansea Docks Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0151385 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 12th October 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A12SE (W)	404	2	266900 192200
18	**Discharge Consents** Operator: Associated British Ports Property Type: Support Services - Sea Transport Location: Swansea Docks Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0151386 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 21st October 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A12SE (W)	404	2	266900 192200
19	**Discharge Consents** Operator: Associated British Ports Property Type: Support Services - Sea Transport Location: Swansea Docks Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055817 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 12th October 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A18SW (NW)	413	2	267100 192800
19	**Discharge Consents** Operator: Associated British Ports Property Type: Support Services - Sea Transport Location: Swansea Docks Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055819 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 12th October 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A18SW (NW)	413	2	267100 192800

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
20	**Discharge Consents** Operator: Bp Chemicals Ltd Property Type: Mineral Oil Processing Location: Queens Dock Shipping Terminal Swa, Swansea Authority: Natural Resources Wales Catchment Area: River Tawe Reference: BP0256604 Permit Version: 1 Effective Date: 2nd October 1995 Issued Date: 2nd October 1995 Revocation Date: Not Supplied Discharge Type: Unspecified Discharge Environment: Freshwater Stream/River Receiving Water: Estuarial Waters Of Queens Doc **Status: New Consent, by Application (Water Resources Act 1991, Section 88)** Positional Accuracy: Located by supplier to within 100m	A8NE (S)	414	2	267500 191900
21	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks - B Shed Wharf Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055852 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 29th September 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A12NE (NW)	455	2	266900 192700
22	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055832 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 2nd October 1995 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A12NE (W)	460	2	266800 192500
23	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055837 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 16th November 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A12SE (SW)	462	2	266900 192100

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
23	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055838 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 18th November 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A12SE (SW)	462	2	266900 192100
24	**Discharge Consents** Operator: Associated British Ports Property Type: Support Services - Sea Transport Location: M&E Amenity Block At Workshops Sw, Swansea Docks Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055835 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 11th January 1993 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Tawe Estuary **Status: Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 100m	A12NE (NW)	489	2	266800 192600
24	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055829 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 12th October 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A12NE (NW)	489	2	266800 192600
24	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055830 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 2nd October 1995 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A12NE (NW)	489	2	266800 192600

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
24	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055831 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 2nd October 1995 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A12NE (NW)	489	2	266800 192600
24	**Discharge Consents** Operator: Associated British Ports Property Type: Undefined Or Other Location: Swansea Docks Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bp0055840 Permit Version: 1 Effective Date: 18th September 1987 Issued Date: 18th September 1987 Revocation Date: 12th October 1992 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Swansea Docks **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A12NE (NW)	489	2	266800 192600
24	**Discharge Consents** Operator: Picon (South Wales) Ltd. Property Type: Undefined Or Other Location: Swansea Docks Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bc0001201 Permit Version: 1 Effective Date: 19th January 1966 Issued Date: 19th January 1966 Revocation Date: 22nd December 1993 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Tidal Basin Prince Of Wales Dr **Status: Consent expired** Positional Accuracy: Located by supplier to within 100m	A12NE (NW)	489	2	266800 192600
24	**Discharge Consents** Operator: Associated British Ports Property Type: Support Services - Sea Transport Location: M&E Amenity Block At Workshops Sw, Swansea Docks Authority: Natural Resources Wales Catchment Area: River Tawe Reference: BP0055835 Permit Version: 2 Effective Date: 12th January 1993 Issued Date: 12th October 1992 Revocation Date: 20th April 2011 Discharge Type: Unspecified Discharge Environment: Saline Estuary Receiving Water: Tawe Estuary **Status: Surrendered under EPR 2010** Positional Accuracy: Located by supplier to within 100m	A12NE (NW)	512	2	266780 192610