

Final V1

Pembrokeshire County Council Waste Transfer Station



Environmental Permit Variation Application

Site Condition Report

Environmental Permit Ref.: EPR/PB3490HV

Project code: 416.00798.00037

Date: May 2019

WRAP's vision is a world in which resources are used sustainably.

Our mission is to accelerate the move to a sustainable resource-efficient economy through re-inventing how we design, produce and sell products; re-thinking how we use and consume products; and re-defining what is possible through re-use and recycling.

Find out more at www.wrapcymru.org.uk

Written by: SLR Consulting Ltd



While we have taken reasonable steps to ensure this report is accurate, WRAP does not accept liability for any loss, damage, cost or expense incurred or arising from reliance on this report. Readers are responsible for assessing the accuracy and conclusions of the content of this report. Quotations and case studies have been drawn from the public domain, with permissions sought where practicable. This report does not represent endorsement of the examples used and has not been endorsed by the organisations and individuals featured within it. This material is subject to copyright. You can copy it free of charge and may use excerpts from it provided they are not used in a misleading context and you must identify the source of the material and acknowledge WRAP's copyright. You must not use this report or material from it to endorse or suggest WRAP has endorsed a commercial product or service. For more details please see WRAP's terms and conditions on our website at www.wrap.org.uk

Contents

- 1.0 Introduction..... 2**
- 1.1 Site Details 3
- 1.2 Condition of the Land at Permit Issue..... 3
- 1.3 Permitted Activities 6
- Appendix 1: Envirocheck Report, Ref 194439773_1_1, 18th February 2019 8**
- Appendix 2: Drawings 9**

Acknowledgements

The content of this Report has been based upon information provided by WRAP Cymru and Pembrokeshire County Council.

1.0 Introduction

SLR Consulting Limited (SLR) has been commissioned by Pembrokeshire County Council (PCC) to prepare a Site Condition Report (SCR) in support of the Environmental Permit (EP) variation application for the Pembrokeshire County Council Waste Transfer Station, located at Unit 41, The Dockyard, Pembroke Dock, Pembrokeshire, SA72 6TD, hereafter referred to as 'the site'.

This EP variation application seeks to extend the permit boundary of the existing site, which is permitted under an EP (Ref EPR/PB3490HV). A SCR was not produced for the original application or during the operation of the site by Sundorne Products (Llanidloes) Limited. Therefore, details pertaining to both the currently permitted and proposed areas are provided within this document, for ease of future surrender.

This SCR aims to record and describe the condition of the land at the site prior to the commencement of any operations within the extended EP boundary. The SCR will capture the conditions of the site at the start of the EP with particular attention paid to contamination levels in the underlying and surrounding soil and groundwater. As the eastern section of the site has been used as a Waste Transfer Station since the granting of its first permit on 16th January 2015 (Under EP Ref EPR/CB3793HE), this SCR will review the condition of the land at the most recent point before works started on the current and proposed extent.

This SCR will provide a point of reference and all baseline environmental data so that when the EP is surrendered it can be demonstrated that there has been no deterioration in the condition of the land as a result of the proposed operations and ensure that the condition of the land is in a 'satisfactory state' on surrender of the EP.

The location of the site is illustrated in Drawing 001 and the Environmental Permit Boundary and Site Layout are illustrated in Drawing 002.

Sections 1 to 3 of Natural Resource Wales's (NRW) SCR template¹ have been completed within this document and comprise the following aspects:

- Site details;
- Condition of the land at permit issue;
- Geology;
- Hydrology;
- Hydrogeology;
- Pollution history; and
- Evidence of historic contamination.
- Permitted activities.

Sections 4 to 7 of the SCR template will be maintained during the life of the permit and Sections 8 to 10 will be completed and submitted in support of the application to surrender the EP.

¹ Natural Resource Wales Site Condition Report Template V3, October 2014

1.1 Site Details

1.0 Site Details	
Name of the applicant	Pembrokeshire County Council
Activity address	Pembrokeshire County Council Waste Transfer Station Unit 41 The Dockyard Pembroke Dock Pembrokeshire SA72 6TD
National grid reference	SM 95702 03746
Document reference and dates for Site Condition Report at permit application and surrender	Application Site Condition Report (reference: 416.00798.00037/SCR), May 2019
Document references for site plans (including location and boundaries)	Drawing 001 Site Location Plan (reference: 416.00798.00037/Drawing001), Drawing 002 Environmental Permit Boundary (reference: 416.00798.00037/Drawing002), Drawing 003 Environmental Site Setting (reference: 416.00798.00037/Drawing003), Drawing WRML-PDOCK34F Residual Bulking Unit 29 & 29A Layout, WAITE Resource Management Ltd, Drawing WRML-PDOCK37N Recycling Material Unit 41 Layout, WAITE Resource Management Ltd.

Note:

In Part A of the application form you must give us details of the site's location and provide us with a site plan. We need a detailed site plan (or plans) showing:

- Site location, the area covered by the site condition report, and the location and nature of the activities and/or waste facilities on the site.
- Locations of receptors, sources of emissions/releases, and monitoring points.
- Site drainage.
- Site surfacing.

If this information is not shown on the site plan required by Part A of the application form then you should submit the additional plan or plans with this site condition report.

1.2 Condition of the Land at Permit Issue

2.0 Condition of the Land at Permit Issue	
Environmental setting including: <ul style="list-style-type: none"> ■ geology ■ hydrogeology ■ surface waters 	<p>The site is situated in Pembroke Dock which is approximately 3km north west of Pembroke in south west Wales. The site is located within The Dockyard and is accessed via Whites Farm Way which links into the A477 further to the east. The National Grid Reference (NGR) for the site is SM 95702 03746.</p> <p>The immediate surrounding land use is predominantly industrial/commercial with a residential area to the south and Milford</p>

	<p>Haven waterway to the north. The site's location is illustrated on Drawing 001 and the EP boundary is illustrated on Drawing 002.</p> <p>Geology</p> <p>A review of the British Geological Survey (BGS) map² reveals that the majority of the site is underlain by a bedrock of Pembroke Limestone Group – Limestone. The northernmost part of the site is underlain by a bedrock of Black Rock Subgroup and Gully Oolite Formation (undifferentiated) – Limestone. Both types of bedrock are indicative of a local environment previously dominated by shallow carbonate seas.</p> <p>There are no recorded superficial deposits.</p> <p>Hydrogeology</p> <p>I. <u>Aquifer Designations</u></p> <p>The bedrock underlying the site is classified as a Principal Aquifer which is defined as "geology that exhibit high permeability and/or provide a high level of water storage".</p> <p>II. <u>Source Protection Zones</u></p> <p>A review of the Lle Map Browser³ confirms that the site does not lie within a Source Protection Zone (SPZ).</p> <p>Hydrology</p> <p>I. <u>Surface Water Features</u></p> <p>The Milford Haven waterway is located to the west and north of the site and at its closest point is approximately 70m to the west.</p> <p>II. <u>Flood Risk</u></p> <p>A small area of the car park to the south of the site buildings is designated as having a low surface water flood risk. The remainder of the site is not identified as being at risk from flooding⁴.</p>
<p>Pollution history including:</p> <ul style="list-style-type: none"> ■ pollution incidents that may have affected land ■ historical land-uses and associated contaminants ■ any visual/olfactory evidence of existing contamination ■ evidence of damage to pollution prevention measures 	<p>The history of the land and surrounding area was identified using the Envirocheck Report (Ref 194439773_1_1) 18th February 2019, and Google Earth Pro. The Envirocheck Report is included as Appendix 01.</p> <p>Pollution Incidents</p> <p><u>On-site</u></p> <p>There are no recorded pollution incidents on site.</p> <p><u>Off-site</u></p> <p>There are 16 recorded pollution incidents to controlled waters within a 1km radius of the site. The closest incident occurred in Pembroke Dock on 28th February 1995 and consisted of a minor incident 105m northeast of the site.</p> <p>All other recorded incidents occurred over 180m from the site and there have been no recorded incidents since November 1997.</p>

² British Geological Survey, Available at www.bgs.ac.uk, accessed in February 2019

³ <http://lle.gov.wales/map>, accessed February 2019

⁴ NRW Long Term Flood Risk Maps, accessed February 2019

There are two Substantiated Pollution Incidents within 1km of the site:
12th October 2015, Significant Incident to Air, 31m South; and
16th July 2002, Significant Incident to Air and onto Land, 549m Southwest.

Historical Land Use

On-site

The site has a long history of industrial use, with the earliest available map from 1869 showing it was located within a Dockyard, and buildings identifiable on the site from 1968.

Off-site

The surrounding landscape has a long history of industrial use, although land to the south has a demonstrable history of residential and open areas in the form of Llanreath, Pembroke Dock and Barrack Hill.

Historical Maps

On-site

1869 Historical maps show the land to be within a dockyard but free from buildings and development

1909 No Change

1953 The wider dockyard is now described as a Flying Boat Base, but there are no discernible infrastructural changes to the land.

1964 No Change

1968 Five buildings are present on site; two to the west, one to the east and two the south.

1976 No Change

1985 No Change

1994 No Change

2000 Removal of southern buildings

2006 No Change

2019 A new unit is visible to the left of the western building units.

Off-site

1869 The northern land comprises an industrial dock, beyond which lies Milford Haven. To the east, a factory lies adjacent to the site followed by various industrial and commercial buildings. A timber pickling pond lies adjacent to the south of the site, followed by a gas works 70m south and a Waste Transfer Station 300m south of the site. Beyond these lie Llanreath residential area and Barrack Hill. Marshland lies adjacent to the west, followed by Milford Haven approximately 20m west.

1909 The surrounding landscape remains mostly unchanged. However, there is a noticeable build-up of land to the west of the site and also of mud to the north and west of the dockyard. The Gasworks to the south of the site is marked as disused, whilst a Dockyard Naval Hospital is visible in its place.

	<p>1953 The Dockland on which the site is located is labelled as a Flying Boat Base. A jetty has been built on the northern dock approximately 220m from the site.</p> <p>1964 The surrounding landscape remains relatively unchanged. A depot is visible 585m south.</p> <p>1968 Several new buildings are visible in close proximity to the northern boundary, but there is a visible reduction in the number of buildings to the east. Several new houses are visible 150m south of the site, whilst a sewage works is visible adjacent to the west of the site.</p> <p>1976 There are an increased number of industrial and commercial buildings to the north and east. Masts are visible approximately 240m south, whilst Defensible Barracks are present 505m southeast. To the west, a Royal Naval Boom Defence Depot is visible approximately 70m from the site.</p> <p>1985 There are no significant changes in the vicinity of the site.</p> <p>1994 The depot to the south of the site is marked as disused on the historical map from 1994.</p> <p>2000 The Royal Naval Boom Defence Depot is no longer visible on the map.</p> <p>2006 A vehicular ferry terminal is visible to the north of the site.</p>
Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available)	<p>There has been no intrusive testing carried out at the site.</p> <p>This assessment has shown that the site has seen a history of industrial use due to its location within the wider dockyard. Unit 29 on the western part of the site was most recently used as a boat painting unit, whilst the other units were used for heavy industrial use and fabrication until their re-designation as a Waste Transfer Station.</p>
Baseline soil and groundwater reference data	Envirocheck Report, Ref 194439773_1_1, 18 th February 2019
Supporting information	Appendix A Envirocheck Report, Ref 194439773_1_1, 18 th February 2019

1.3 Permitted Activities

3.0 Permitted Activities	
Permitted activities	<p>Household, commercial and industrial waste transfer station with treatment</p> <p>Limit: 74,000 tonnes per annum (tpa) of non-hazardous waste</p> <p>D15 Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where the waste is produced)</p> <p>R13 Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where the waste is produced)</p>

	<p>D14 Repackaging prior to submission of any of the operations numbered D1 to D13</p> <p>D9 Physico-chemical treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D12 (e.g. evaporation, drying, calcination etc)</p> <p>R3 Recycling/reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes)</p> <p>R4 Recycling/reclamation of metals and metal compounds</p> <p>R5 Recycling/reclamation of other inorganic materials</p>
<p>Non-permitted activities undertaken</p>	<p>Permitted activities will take place within Units 41, 29 and 29A, as well as in storage bays to the east of Unit 41.</p> <p>The rest of the site hosts non-permitted activities including delivery vehicle movement in the north and a car parking area to the south.</p> <p>An exemption (S2: Storing waste in a secure place) is in place on site and will be used for the storage of glass outside in a container.</p>
<p>Document references for:</p> <ul style="list-style-type: none"> ■ plan showing activity layout; and ■ environmental risk assessment. 	<p>Drawing 002 Environmental Permit Boundary (reference 416.00798.00037/Drawing002).</p> <p>Environmental Risk Assessment (reference: 416.00798.00037/ERA).</p>

Note:

In Part B of the application form you must tell us about the activities that you will undertake at the site. You must also give us an environmental risk assessment. This risk assessment must be based on our guidance (Environmental Risk Assessment - EPR H1) or use an equivalent approach.

It is essential that you identify in your environmental risk assessment all the substances used and produced that could pollute the soil or groundwater if there were an accident, or if measures to protect land fail.

These include substances that would be classified as 'dangerous' under the Control of Major Accident Hazards (COMAH) regulations and also raw materials, fuels, intermediates, products, wastes and effluents.

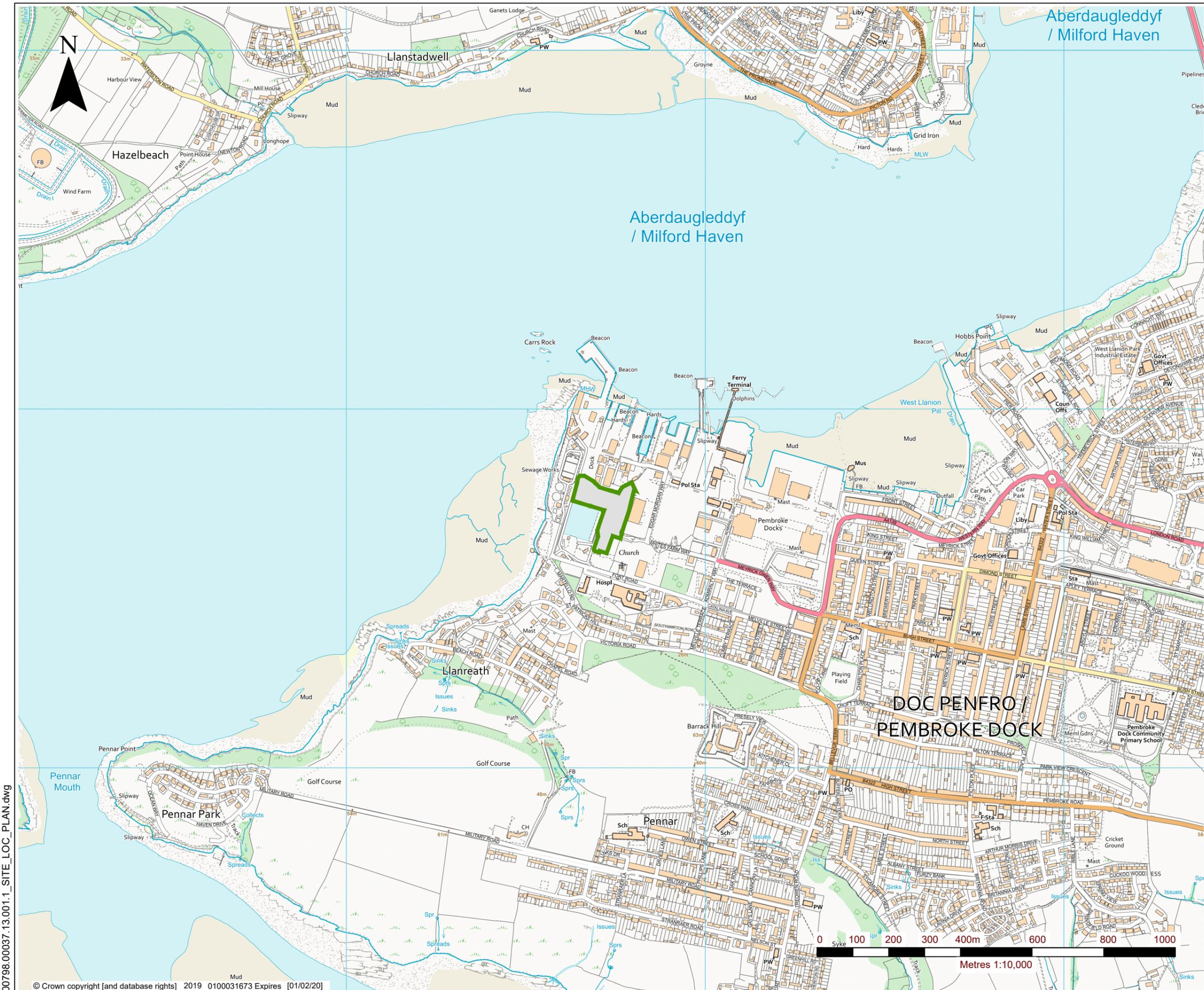
If your submitted environmental risk assessment does not adequately address the risks to soil and groundwater we may need to request further information from you or even refuse your permit application.

Appendix 1: Envirocheck Report, Ref 194439773_1_1, 18th February 2019

See separate attachment.

Appendix 2: Drawings

Drawing 001	Site Location Plan
Drawing 002	Environmental Permit Boundary
Drawing 003	Environmental Site Setting
Drawing WRML-PDOCK34F	P.Dock-Residual Bulking Unit 29 & 29A Layout
Drawing WRML-PDOCK37N	Pembroke Dock – Recycling Material Unit 41 Layout



LEGEND



SLR
global environmental solutions

3RD FLOOR
THE BREW HOUSE
JACOB STREET
BRISTOL, BS2 0EQ

T: 01179 064280
www.slrconsulting.com

**PEMBROKE COUNTY COUNCIL
WASTE TRANSFER STATION**

**ENVIRONMENTAL PERMIT
VARIATION**

SITE LOCATION PLAN

DRAWING 001

Scale: 1:10,000 @ A3 Date: MAY 2019

00798.00037.13.001.1_SITE_LOC_PLAN.dwg

© Crown copyright [and database rights] 2019 0100031673 Expires [01/02/20]

© This drawing and its content are the copyright of SLR Consulting Ltd and may not be reproduced or amended except by prior written permission. SLR Consulting Ltd accepts no liability for any amendments made by other persons.



LEGEND

 ENVIRONMENTAL PERMIT BOUNDARY



SLR
global environmental solutions

3RD FLOOR
THE BREW HOUSE
JACOB STREET
BRISTOL, BS2 0EQ
T: 01179 064280
www.slrconsulting.com

**PEMBROKE COUNTY COUNCIL
WASTE TRANSFER STATION**

**ENVIRONMENTAL PERMIT
VARIATION**

**ENVIRONMENTAL PERMIT
BOUNDARY**

DRAWING 002

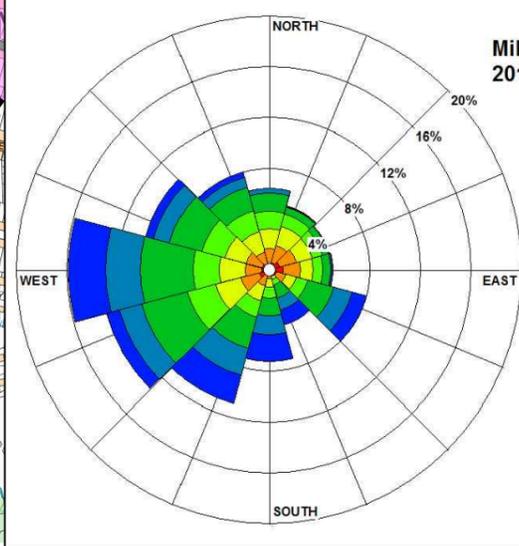
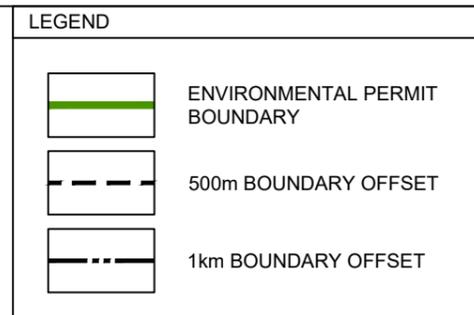
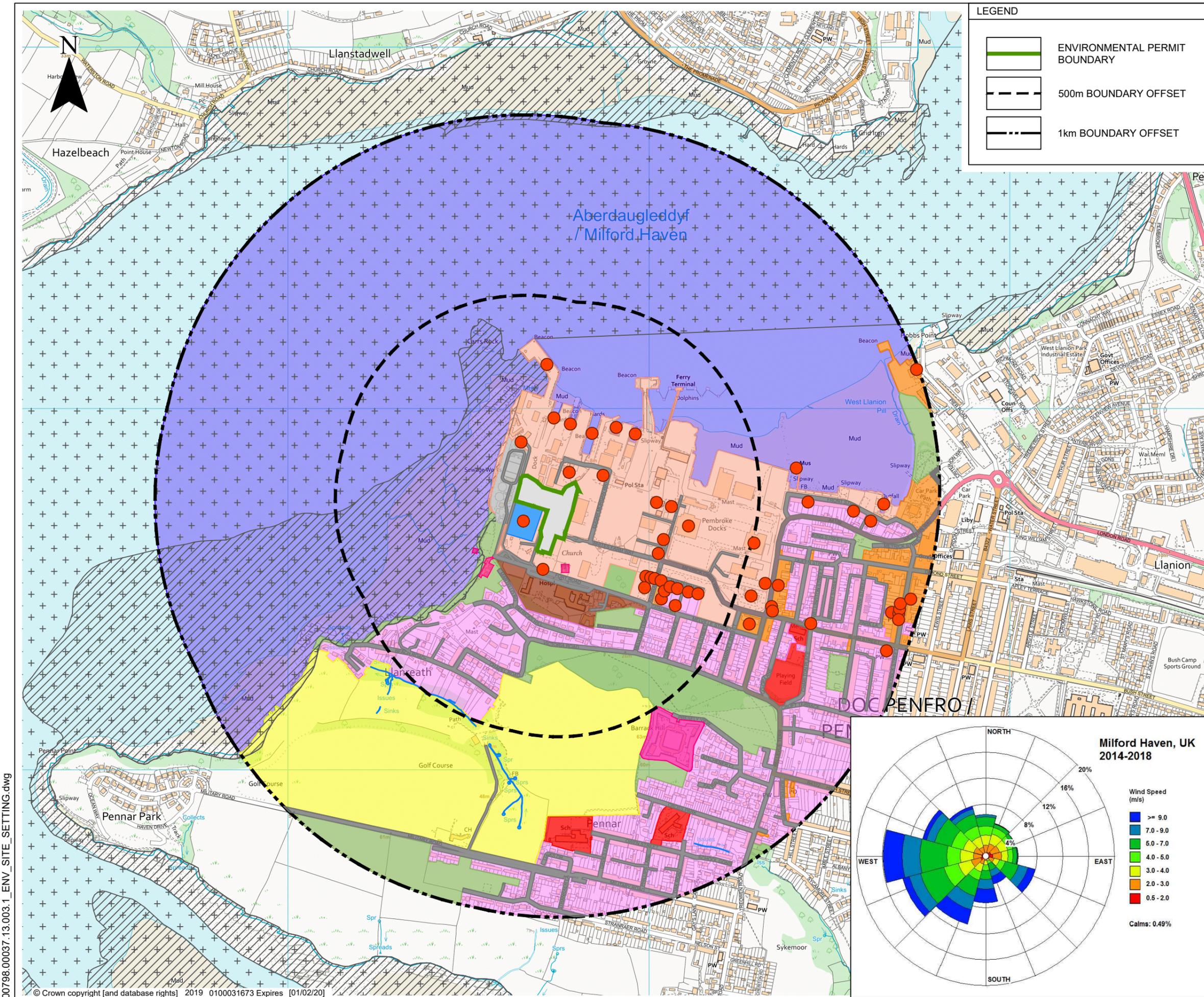
Scale 1:1000 @ A3 Date MAY 2019



00798.00037.13.002.2_ENV_PERMIT_BDY.dwg

© Crown copyright [and database rights] 2019 0100031673 Expires [01/02/20]

© This drawing and its content are the copyright of SLR Consulting Ltd and may not be reproduced or amended except by prior written permission. SLR Consulting Ltd accepts no liability for any amendments made by other persons.



SLR
global environmental solutions

3RD FLOOR
THE BREW HOUSE
JACOB STREET
BRISTOL, BS2 0EQ
T: 01179 064280
www.slrconsulting.com

**PEMBROKE COUNTY COUNCIL
WASTE TRANSFER STATION**

**ENVIRONMENTAL PERMIT
VARIATION**

ENVIRONMENTAL SITE SETTING

DRAWING 003

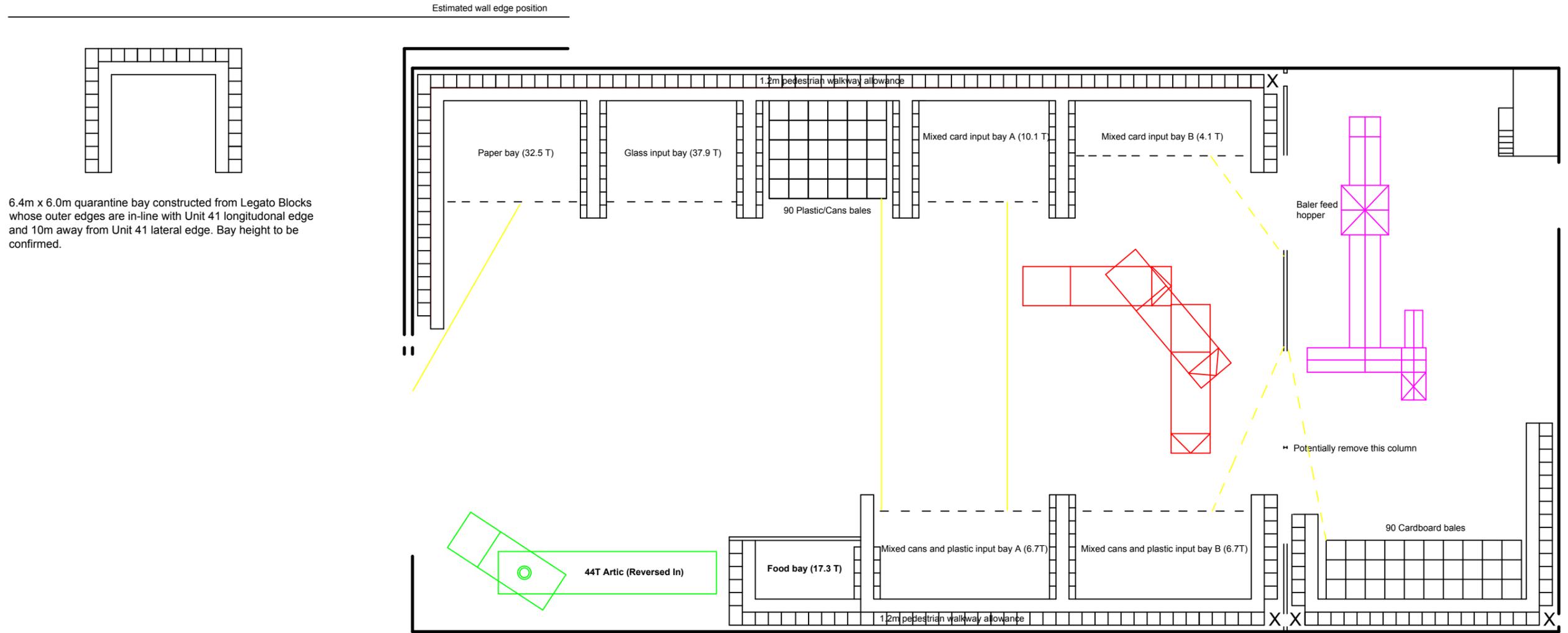
Scale: 1:10,000 @ A3 Date: MAY 2019

00798.00037.13.003.1_ENV_SITE_SETTING.dwg

© Crown copyright [and database rights] 2019 0100031673 Expires [01/02/20]

© This drawing and its content are the copyright of SLR Consulting Ltd and may not be reproduced or amended except by prior written permission. SLR Consulting Ltd accepts no liability for any amendments made by other persons.

All work produced will contain a disclaimer outlining that WRAP has produced layouts and designs in support of operational efficiency and does not accept liability for the accuracy of drawings and the authority should satisfy themselves of their adequacy to meet their own and regulatory requirements.

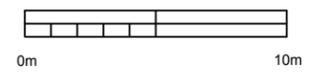


6.4m x 6.0m quarantine bay constructed from Legato Blocks whose outer edges are in-line with Unit 41 longitudinal edge and 10m away from Unit 41 lateral edge. Bay height to be confirmed.

Estimated wall edge position

Notes

- This layout must be verified with a practical on-site trial using actual RRV's and 44T tractor/trailer to confirm access and egress.
- 5m Standard Romaquip 9.19m x 2.45m with tightest turning circle (wall to wall diameter) taken as 16.8m
- Storage bay tonnage derived from assumed material densities.
- Material height in storage bays 3m sloping to bay opening with 1m freeboard. Food bay assumed gated height 1.5m.
- ASSUMED. Trailer 13.5 x 2.5 and 25m outer turning circle. Final position requires site trial verification.
- Bale Size 1.2m wide x 1.2m deep x 0.75m high stored three high.
- Location of material storage bays and equipment positions would need verification and approval by the appropriate Regulators in terms of fire prevention and mitigation.
- Loading materials and bales out may need to be undertaken externally.
- - - Worst case fire distance utilised in FP&MP consideration with dotted yellow line requiring discussion with NRW.



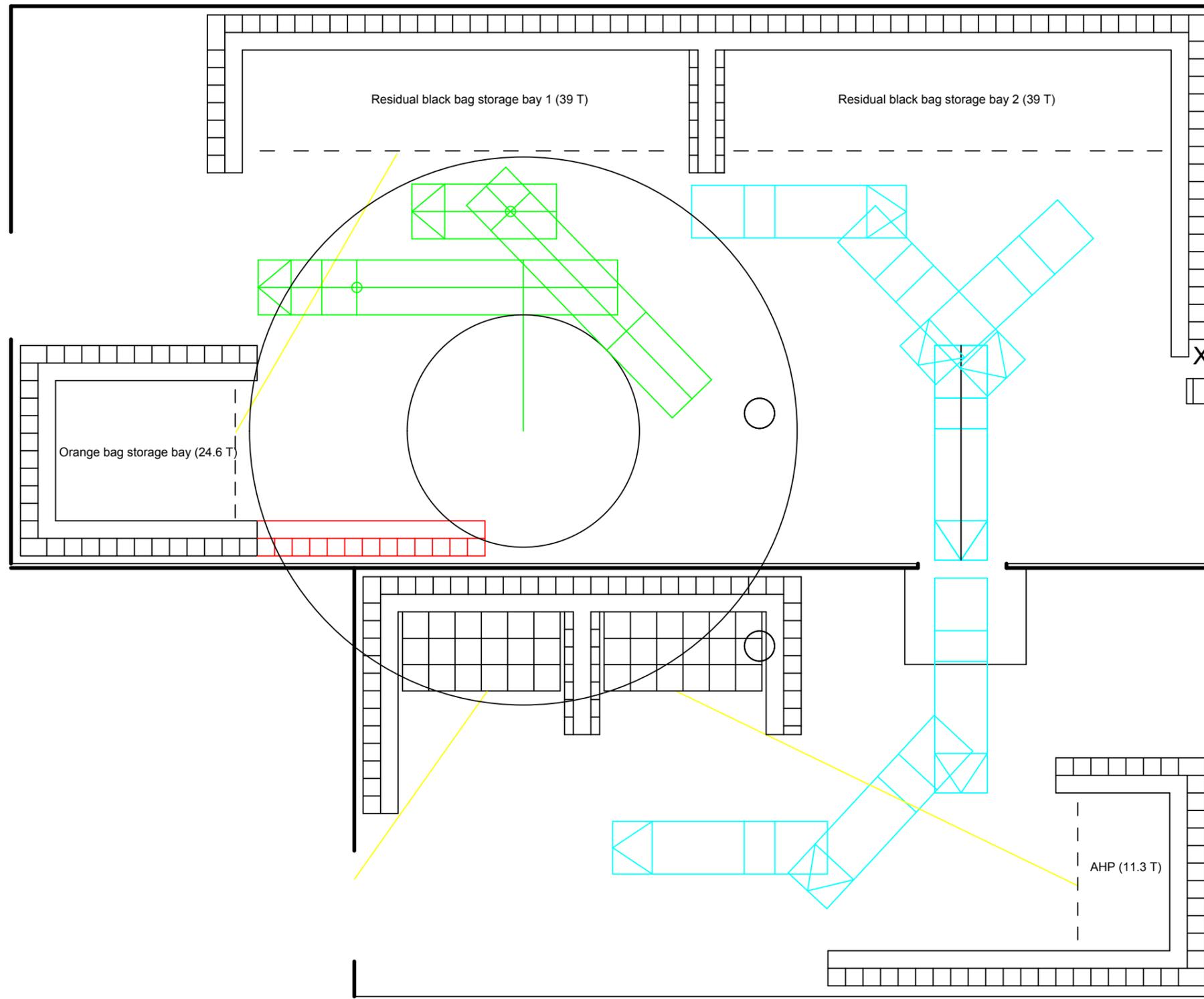
Legato storage bay wall thickness 0.8m with pedestrian access over the 0.8m high base blocks. Lagato to confirm block layout within the building before blocks are purchased. No Legato base blocks at points 'X' to allow ground level access through existing doorways. Steps required onto base blocks which will need a walkway surface.

Thickness from Unit 41 internal wall to external cladding has been estimated.

WAITE Resource Management Ltd

Title	Pembroke Dock - Recycling Material Unit 41 Layout October 2019
Scale	As scale indicator
Date	11th January 2019
Drg No	WRML - PDOCK37N
Client	WRAP Cymru

All work produced will contain a disclaimer outlining that WRAP has produced layouts and designs in support of operational efficiency and does not accept liability for the accuracy of drawings and the authority should satisfy themselves of their adequacy to meet their own and regulatory requirements



Notes

This layout must be verified with a practical on-site trial using actual RCV's to confirm RCV access and egress.

— 26T RCV 9.86m x 2.46m with turning circle dimensions provided by WRAP.

Storage bay tonnage derived from assumed material densities.

Material height in storage bays 3m sloping to bay opening with 1m freeboard.

Location of material storage bays would need verification and approval by the appropriate Regulators in terms of fire prevention and mitigation.

Loading out from storage bays may need to be undertaken externally.

— Worst case fire distance utilised in FP&MP consideration.

Bale size taken as 1.2 x 1.2 x 0.7h high. Stored three high.

Legato storage bay wall thickness 0.8m with pedestrian access over the 0.8m high base blocks. Legato to confirm block layout within the building before blocks are purchased. No Legato base blocks at points 'X' to allow ground level access. Steps required onto base blocks which will need a walkway surface.

WAITE Resource Management Ltd

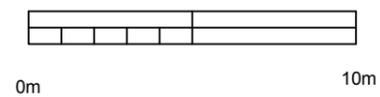
Title P. Dock - Residual Bulking Unit 29 & 29A Layout October 2019

Scale As scale indicator

Date 31st October 2018

Drg No WRML - PDOCK34F

Client WRAP Cymru



www.wrapcymru.org.uk/CCP

