

## COFNOD / MEMORANDUM

I / To:	<b>Mr. Robert Lankshear</b>	Oddi Wrth / From:	<b>D Margetson</b>
Adran / Dept:	<b>Planning Department</b>	Ein cyf / Our ref:	<b>SRS/E/DMM/202001170OUT</b>
Dyddiad / Date:	<b>3 November 2020</b>	Ffôn / Tel:	<b>03001236696</b>
Eich Cyf / Your Ref:	<b>P/DC/LC/RL/2020/01170/OUT</b>	Ebost / Email:	<b>EnvPlan-SRSWales@valeofglamorgan.gov.uk</b>

**SUBJECT: PLANNING APPLICATION NO: 2020/01170/OUT: LAND AT UPPER COSMESTON FARM, LAVERNOCK ROAD, PENARTH; OUTLINE APPLICATION FOR RESIDENTIAL DEVELOPMENT, A PRIMARY SCHOOL, COMMUNITY SPACE AND PUBLIC OPEN SPACE WITH ALL MATTERS RESERVED OTHER THAN ACCESS.**

Further to receipt of the above accepted planning application, I would like to provide comments in relation to potential contamination issues on behalf of Shared Regulatory Services Environment Team (SRS). The following submissions for the above application have been reviewed:

Arcadis, February 2016; Phase 1 Geo-environmental Desk Study. Version 03.  
Arcadis, February 2018; Phase 1 and Phase 2 Ground Investigation Report Ref: 001-UA008386-UP32R-01 Version 01.  
Arcadis, July 2018; Phase 1 Desk Study and Phase 2 Geo Environmental and Geotechnical Assessment Report Ref: 002-UA008386-UP32R-03 Version 03.  
Earth Science Partnership October 2019; Preliminary Controlled Water Risk Assessment Draft ESP.7061b.3215 rev1  
Earth Science Partnership, 5 November 2019; Geo-Environmental and Geotechnical Assessment 1 Final ESP 7061b.3166  
Asbri Planning, September 2020; Land at Upper Cosmeston Farm, Lavernock Road, Penarth: Environmental Statement Volume 2 Chapter 9: Ground Conditions.

The most recent of the above contamination assessments is the Geo-Environmental and Geotechnical Assessment report by Earth Science Partnership (ESP), undertaken in 2019. This report is an assessment of the potential risks to human health and the environment from contamination, based on previous assessments (above) and further site investigation work undertaken by ESP across the majority of the development. It is noted that for various reasons, parts of the development were not accessible to ESP. ESP have provided a detailed conceptual site model which identifies areas A-D (identified on Fig 1 of their report) defined by the differing ground conditions and potential risks associated with contaminants within the soil and ground gas:

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## Contaminants within the soil.

In relation to soil, ESP have identified contaminants of concern within the shallow soils that exceed the relevant guideline criteria and require remediation. These contaminants include arsenic and some PAH compounds which are elevated above the relevant guideline criteria in Areas B, C and D, and are close to the guideline value for Area A. In addition, TPH compounds were identified in Areas B, C and D. The investigation by ESP did not identify any asbestos containing materials. However, they acknowledge that a single occurrence of asbestos was identified on site during a previous investigation.

ESP also acknowledge the need for further assessment, including site investigation in previously inaccessible areas. Additional investigations are also recommended in order to better define the risks from contamination and inform the remediation strategy.

SRS consider that further assessment is required to assess the risk associated with ground contamination affecting the development, including areas of the site not previously investigated. On completion of this work, the Developer will need to submit details of –

Contamination Assessment of the development based on all available data.

Remediation Scheme and Verification Plan to deal with the identified risks to human health and the environment and ensure the development is made suitable for use.

Remediation Verification Report to demonstrate the correct installation and effectiveness of the completed remediation measures.

## Ground gas

In relation to ground gas, whilst the programme of monitoring and assessment was ongoing at the time the report was written, the findings to date indicate significant gassing in parts of the site and the need for ground gas protection measures across the development.

ESP have provided general guidance and recommendations in relation to ground gas protection. They also acknowledge the need for further assessment, including ground gas monitoring and assessment. In addition, ESP have highlighted the need for consideration of the proposed use of part of the site for allotment gardens.

SRS considers there may be difficulties in regulating allotment activities post construction. Based on the available information relating to the ground gas regime this could be cause for concern, particularly on the part of the site currently allocated for this use (as identified in the Proposed Masterplan, Drawing Ref UFC- ASL- 00- 00- DR- A- 0930).

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SRS consider that further assessment is required to assess the risk associated with ground gas affecting the site; including areas of the site not previously investigated and assessment of the potential changes to the ground gas regime brought about by the construction process. On completion of this work, the Developer will need to submit details of –

Ground Gas Risk Assessment of the development based on all available data.

Ground Gas Protection Measures and Verification Plan for each form of occupation on site to deal with the identified risks and ensure the development is made suitable for use: In addition to protection of occupants of permanent structures, the Developer will need to submit proposals for the protection of occupants of the allotment gardens.

Ground Gas Protection Measures Verification Report to demonstrate the correct installation and effectiveness of the completed protection measures.

SRS recommends the following conditions, to ensure that the safety of future occupiers is not prejudiced in accordance with policy MD7 of the Vale of Glamorgan Local Development Plan:

## CONDITIONS

### **PC13. GROUND GAS PROTECTION**

Prior to the commencement of any development works a scheme to investigate and monitor the site for the presence of gases\* being generated at the site or land adjoining thereto, including a plan of the area to be monitored, shall be submitted to the Local Planning Authority for its approval.

Following completion of the approved monitoring scheme, the proposed details of appropriate gas protection measures to ensure the safe and inoffensive dispersal or management of gases and to prevent lateral migration of gases into or from land surrounding the application site shall be submitted to and approved in writing to the LPA. If no protection measures are required than no further actions will be required.

All required gas protection measures shall be installed and appropriately verified before occupation of any part of the development which has been permitted and the approved protection measures shall be retained and maintained until such time as the Local Planning Authority agrees in writing that the measures are no longer required.

\* 'Gases' include landfill gases, vapours from contaminated land sites, and naturally occurring methane and carbon dioxide, but does not include radon gas. Gas Monitoring programmes should be designed in

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line with current best practice as detailed in CIRIA 665 and or BS8485 year 2007 Code of Practice for the Characterization and Remediation from Ground Gas in Affected Developments,

Reason: To ensure that the safety of future occupiers is not prejudiced.

## **PC14A. CONTAMINATED LAND MEASURES – ASSESSMENT**

Prior to the commencement of the development an assessment of the nature and extent of contamination shall be submitted to and approved in writing by the Local Planning Authority. This assessment must be carried out by or under the direction of a suitably qualified competent person \* in accordance with BS10175 (2011) Code of Practice for the Investigation of Potentially Contaminated Sites and shall assess any contamination on the site, whether or not it originates on the site.

The report of the findings shall include:

(i) a desk top study to identify all previous uses at the site and potential contaminants associated with those uses and the impacts from those contaminants on land and controlled waters. The desk study shall establish a 'conceptual site model' (CSM) which identifies and assesses all identified potential source, pathway, and receptor linkages;

(ii) an intrusive investigation to assess the extent, scale and nature of contamination which may be present, if identified as required by the desk top study;

(iii) an assessment of the potential risks to:

- human health,
- groundwaters and surface waters
- adjoining land,
- property (existing or proposed) including buildings, crops, livestock, pets, woodland and service lines and pipes,
- ecological systems,
  - archaeological sites and ancient monuments; and
- any other receptors identified at (i)

(iv) an appraisal of remedial options, and justification for the preferred remedial option(s).

All work and submissions carried out for the purposes of this condition must be conducted in accordance with DEFRA and the Environment Agency's 'Model procedures for the Management of Land Contamination, CLR 11' (September 2004) and the WLGA / WG / NRW guidance document ' Land Contamination: A guide for Developers' (2017),, unless the Local Planning Authority agrees to any variation.

\* A 'suitably qualified competent person' would normally be expected to be a chartered member of an appropriate professional body (such as the Institution of Civil Engineers, Geological Society of London,

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Royal Institution of Chartered Surveyors, Institution of Environmental Management) and also have relevant experience of investigating contaminated sites.

Reason: To ensure that information provided for the assessment of the risks from land contamination to the future users of the land, neighbouring land, controlled waters, property and ecological systems is sufficient to enable a proper assessment.

## **PC14B. CONTAMINATED LAND MEASURES – REMEDIATION & VERIFICATION PLAN**

Prior to the commencement of the development a detailed remediation scheme and verification plan to bring the site to a condition suitable for the intended use by removing any unacceptable risks to human health, controlled waters, buildings, other property and the natural and historical environment shall be submitted to and approved in writing by the Local Planning Authority. The scheme shall include all works to be undertaken, proposed remediation objectives and remediation criteria, a timetable of works and site management procedures. The scheme must ensure that the site will not qualify as contaminated land under Part 2A of the Environmental Protection Act 1990 in relation to the intended use of the land after remediation.

All work and submissions carried out for the purposes of this condition must be conducted in accordance with DEFRA and the Environment Agency's 'Model procedures for the Management of Land Contamination, CLR 11' (September 2004) and the WLGA / WG / NRW guidance document ' Land Contamination: A guide for Developers' (2017),, unless the Local Planning Authority agrees to any variation.

Reason: To ensure that any unacceptable risks from land contamination to the future users of the land , neighbouring land, controlled waters, property and ecological systems are minimised, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors.

## **PC14C. CONTAMINATED LAND MEASURES - REMEDIATION & VERIFICATION**

The remediation scheme approved by condition x (PC14B above) must be fully undertaken in accordance with its terms prior to the occupation of any part of the development unless otherwise agreed in writing by the Local Planning Authority. The Local Planning Authority must be given two weeks written notification of commencement of the remediation scheme works.

Within 6 months of the completion of the measures identified in the approved remediation scheme, a verification report that demonstrates the effectiveness of the remediation carried out must be submitted to and approved in writing by the Local Planning Authority.

All work and submissions carried out for the purposes of this condition must be conducted in accordance with DEFRA and the Environment Agency's 'Model procedures for the Management of Land



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Contamination, CLR 11' (September 2004) and the WLGA / WG / NRW guidance document ' Land Contamination: A guide for Developers' (2017),, unless the Local Planning Authority agrees to any variation.

Reason : To ensure that any unacceptable risks from land contamination to the future users of the land , neighbouring land, controlled waters, property and ecological systems are minimised, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors.

## **PC14D. CONTAMINATED LAND MEASURES – UNFORESEEN CONTAMINATION**

In the event that contamination is found at any time when carrying out the approved development that was not previously identified it must be reported in writing within 2 days to the Local Planning Authority, all associated works must stop, and no further development shall take place unless otherwise agreed in writing until a scheme to deal with the contamination found has been approved. An investigation and risk assessment must be undertaken and where remediation is necessary a remediation scheme and verification plan must be prepared and submitted to and approved in writing by the Local Planning Authority. Following completion of measures identified in the approved remediation scheme a verification report must be submitted to and approved in writing by the Local Planning Authority. The timescale for the above actions shall be agreed with the LPA within 2 weeks of the discovery of any unsuspected contamination.

Reason: To ensure that any unacceptable risks from land contamination to the future users of the land , neighbouring land, controlled waters, property and ecological systems are minimised, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors.

## **PC15A IMPORTED SOIL**

Any topsoil [natural or manufactured], or subsoil, to be imported shall be assessed for chemical or other potential contaminants in accordance with a scheme of investigation which shall be submitted to and approved in writing by the Local Planning Authority in advance of its importation. Only material approved by the Local Planning Authority shall be imported. All measures specified in the approved scheme shall be undertaken in accordance with the relevant Code of Practice and Guidance Notes.

Subject to approval of the above, sampling of the material received at the development site to verify that the imported soil is free from contamination shall be undertaken in accordance with a scheme and timescale to be agreed in writing by the LPA.

Reason: To ensure that the safety of future occupiers is not prejudiced.

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## **PC15B IMPORTED AGGREGATES**

Any aggregate (other than virgin quarry stone) or recycled aggregate material to be imported shall be assessed for chemical or other potential contaminants in accordance with a scheme of investigation which shall be submitted to and approved in writing by the Local Planning Authority in advance of its importation. Only material approved by the Local Planning Authority shall be imported. All measures specified in the approved scheme shall be undertaken in accordance with the relevant Code of Practice and Guidance Notes.

Subject to approval of the above, sampling of the material received at the development site to verify that the imported material is free from contamination shall be undertaken in accordance with a scheme and timescale to be agreed in writing by the LPA.

Reason: To ensure that the safety of future occupiers is not prejudiced.

## **PC15C USE OF SITE WON MATERIALS**

Any site won material including soils, aggregates, recycled materials shall be assessed for chemical or other potential contaminants in accordance with a sampling scheme which shall be submitted to and approved in writing by the Local Planning Authority in advance of the reuse of site won materials. Only material which meets site specific target values approved by the Local Planning Authority shall be reused.

Reason: To ensure that the safety of future occupiers is not prejudiced.

## ADVISORY/INFORMATIVE

### **R4 CONTAMINATION AND UNSTABLE LAND ADVISORY NOTICE**

The contamination assessments and the affects of unstable land are considered on the basis of the best information available to the Planning Authority and are not necessarily exhaustive. The Authority takes due diligence when assessing these impacts, however you are minded that the responsibility for

- (i) determining the extent and effects of such constraints;
- (ii) ensuring that any imported materials (including, topsoils, subsoils, aggregates and recycled or manufactured aggregates/ soils) are chemically suitable for the proposed end use. Under no circumstances should controlled waste be imported. It is an offence under Section 33 of the Environmental Protection Act 1990 to deposit controlled waste on a site which does not benefit from an appropriate waste management license. The following must not be imported to a development site;

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- Unprocessed / unsorted demolition wastes.
  - Any materials originating from a site confirmed as being contaminated or potentially contaminated by chemical or radioactive substances.
  - Japanese Knotweed stems, leaves and rhizome infested soils. In addition to section 33 above, it is also an offence under the Wildlife and Countryside Act 1981 to spread this invasive weed; and
- (iii) the safe development and secure occupancy of the site rests with the developer.

Proposals for areas of possible land instability should take due account of the physical and chemical constraints and may include action on land reclamation or other remedial action to enable beneficial use of unstable land.

The Local Planning Authority has determined the application on the basis of the information available to it, but this does not mean that the land can be considered free from contamination.

**Environment Team**  
**Shared Regulatory Services**  
**Bridgend, Cardiff & the Vale of Glamorgan**