## **Utilities Assessment**

For:



# Llanmoor Development Company Ltd

# **West Bridgend**

April 2020

### **Contents**

Section 1 Introduction and Purpos	ection 1	Introduction and Purpose
-----------------------------------	----------	--------------------------

Section 2 Existing Utility Infrastructure

Section 3 New Utility Infrastructure



#### Section 1 Introduction and Purpose

Llanmoor Development Company Ltd has requested that Utilitas Associates Ltd provide an Utilities Assessment Report for the Utility Infrastructure works in relation to the proposed development of Parc Llangewydd / Land off the A473 West Bridgend.

The development consists of between 850no to 1,000no new dwellings.

The purpose of the Report is to confirm the current proposed strategy, in relation to existing and new Utility Services (Electric, Clean Water, Gas and Telecommunications) to serve the development.

We have taken reasonable measures to ensure the most upto date and relevant information is contained within this report, but we accept no liability for the accuracy of such information.



#### Section 2 Existing Utility Infrastructure

#### **Electricity – Western Power Distribution (WPD)**

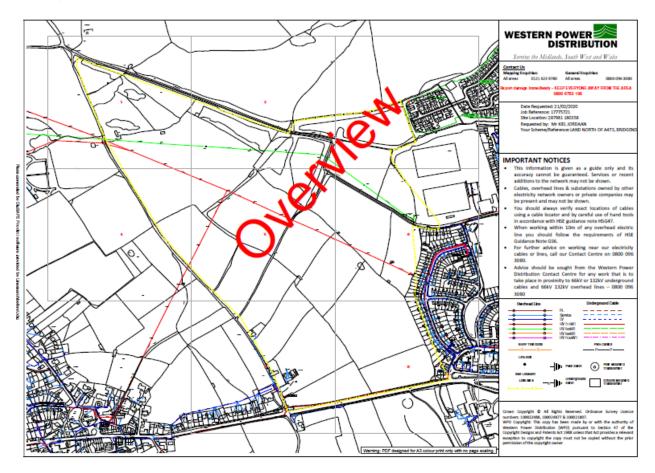
Plans show 2no spans overhead 11kV High Voltage (HV) cables, 1no running southeast to northwest, a second span is connected to these lines in a central location and runs southwest through the site.

Additionally, plans show overhead 33kV Extra High Voltage (EHV) running east to west across the northern area of the site.

These power lines will be maintained on site and diverted / undergrounded where necessary, via dedicated service strips along the footpaths of the development site, in accordance with WPD requirements.

Plans show 11kV and LV mains cables along the A473, with no cables shown to the north along Llangewydd Road. Diversionary works are anticipated for the construction of the new site entrance off the A473.

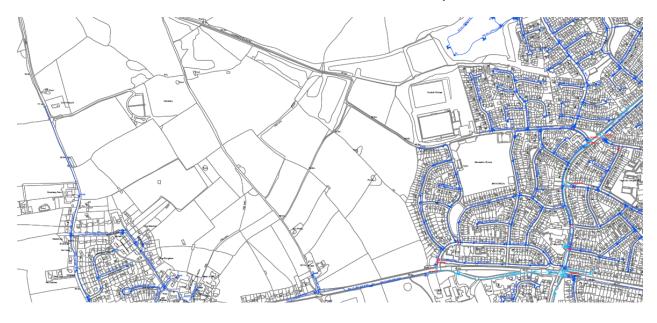
It is proposed at this stage, that all necessary works would be within the footprint of the development area.





#### Water - Dwr Cymru Welsh Water (DCWW)

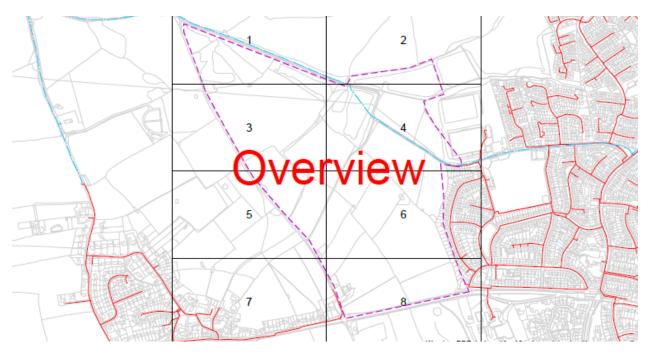
Plans show a 6" main along the A473, no Water mains are shown to the north along Llangewydd Road. Possible minor diversion / relocation works may be required for the proposed site entrance off the A473. No Water mains are shown with the redline boundary of the site.



#### Gas – Wales & West Utilities (W&WU)

Plans show a 10" Spun Iron Medium Pressure (MP) along Llangewydd Road, this is shown to enter the redline site boundary at the north eastern corner, where it then continues along Llangewydd Road. Any necessary relocation works would be undertaken by W&WU on site.

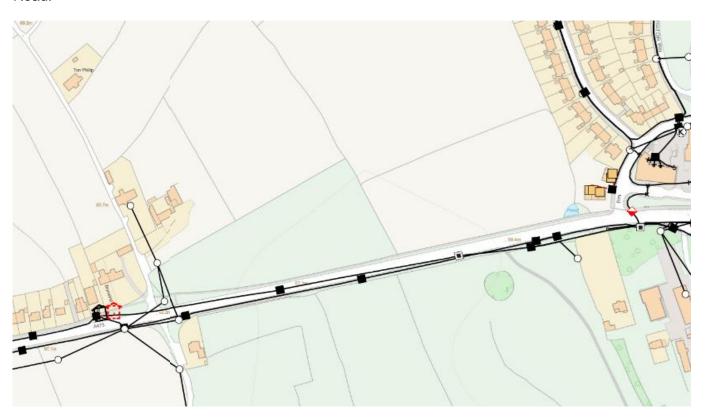
No Gas mains are shown along the site frontage of the A473. To the west plans show a 90mm Low Pressure (LP) main which terminates in the western boundary highway outside the existing properties known as Mayfield and Rhosla.





#### **Telecommunications – Openreach**

Openreach record plans show a network along the A473, any necessary diversionary works for the proposed site entrance would be undertaken by Openreach accordingly. A span of overhead line crosses the south western corner of the site from the A473 serving Mayfield and Rhosla. No further apparatus is shown either within the site boundary, or to the north along Llangewydd Road.



#### **Telecommunications – Virgin Media**

Plans show Virgin Media have a network to the east of the site serving Bryntirion. No apparatus is shown on site, along the A473 or to the north along Llangewydd Road. At this stage, diversionary works are not anticipated.





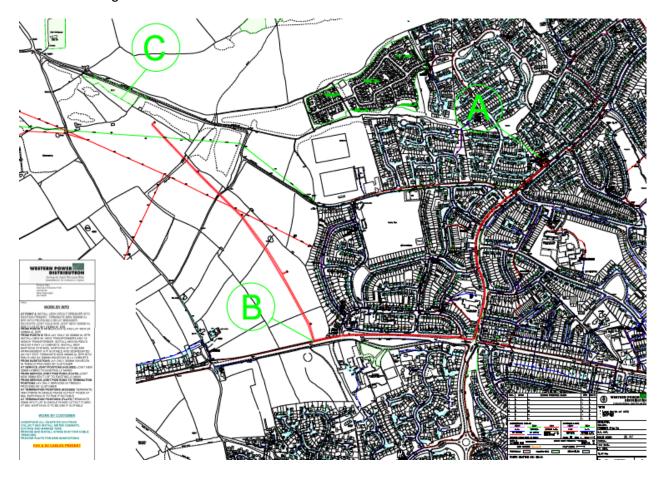
#### Section 3 New Utility Infrastructure

#### **Electricity**

WPD have confirmed the development can be served with power from their existing Primary Substation to the east of the site located on Bright Hill. New 11kV HV cables will be laid from this location on to the site, where the necessary standard distribution Substations will be sympathetically located, in accordance with WPD requirements to serve the development.

The off site cable laying works will be subject to the necessary road opening licences from the Highway Authority. The appointed Electric Provider for the development will undertake this work in close liaison with all necessary stakeholders, in order to ensure the works are completed with minimal disruption.

It is anticipated that Electric Vehicle Charging Points (EVCP) will be provided to a number of new dwellings.



#### Water

DCWW will be commissioned to undertake a Hydraulic Modelling Assessment (HMA) in order to confirm capacity in the local network and to confirm the requirement and scope for any necessary reinforcement works.

Any necessary reinforcement works would be undertaken by DCWW.

Water mains will be laid on site with metered supplies to each dwelling, including for the provision of sprinklers to each new home.



#### Gas

W&WU have confirmed their existing Medium Pressure main on site currently has capacity to serve the development.

Enquiries to W&WU will confirm the capacity for the Low Pressure network in the A473 to possibly serve an initial phase of build.

#### **Fibre**

The current Openreach policy is to provide Superfast Broadband 'Fibre to the Premises' to all development sites over 30no dwellings. This provision enables each home to have direct Fibre connectivity.

In summary, Utility Services are available to serve the development including Electricity, Water, Gas and Fibre.

Detailed applications for these services will be developed within the next project stage to ascertain further detail on capacities and extent of works needed.