

St. Modwen Developments Limited

Coed Darcy

Utilities Report

26th November 2021

Contents

- 1) Summary
- 2) Table of utility provision
- 3) Site phasing layout

DRHSS have prepared this report specifically for St. Modwen Developments Limited.

This report may be provided to third parties solely to inform any such person that our report has been prepared and to make them aware of its substance but not for the purposes of reliance.

In preparing this report we have relied on information provided by others, and we do not accept responsibility for the accuracy of such information.

Executive Summary

The following information has been produced to support the planning application associated with the development of the land known as Coed Darcy, Neath, South Wales.

Following the guidelines established in Arup's Energy Strategy dated 11th October 2021, the following utility strategy includes for the use of low energy technologies through out and the use of electric heating to each dwelling. This heating will be in the form of either ground source or air source heat pumps. In addition, and to future proof utility strategy, we have included for each home to have one electrical vehicle charging point (EVCP).

Mains potable water and Fire Safety supplies will be extended through out the development ensuring each dwelling and premises has a dedicated supply in accordance with The Water Supply (Water Quality) Regulations 2018 along with Welsh Water's latest recommendations.

Table of utility provision

The following table is based on information provided by Western Power Distribution. As we are in the very early stages of the design development of this site, we have based our initial iteration on an average 2-Bed dwelling.

WPD Anticipated Maximum Demand loadings										
Heating type	1 Bed/Studio		2 Bed		3 Bed		4 Bed		5 Bed	
	Day (kW)	Night (kW)	Day (kW)	Night (kW)	Day (kW)	Night (kW)	Day (kW)	Night (kW)	Day (kW)	Night (kW)
Non-Electric	0.9		1.3		1.7		2		2.3	
E7 - N/A	1.3	1.3	1.8	2	2.3	2.5	2.7	2.8	3.1	2.9
E10/other electric N/A	5.8		6.3		6.8		7.2		7.4	
ASHP	5.4		5.8		6.2		6.5		6.8	
EVCP per dwelling	3.5		3.5		3.5		3.5		3.5	

Loading options basd on the current accommodation schedule										
	Qty	kW	Qty	kW	Qty	kW	Qty	kW	Qty	kW
Phase 1 - Complete										
Phase 2A - Dwelling		0	142	1321		0		0		0
Phase 2A - Commercial 1134m2				125						
Phase 2B - Dwelling			170	1581						
Phase 3 - Dwelling			207	1925						
Phase 4 - Dwelling			64	595						
Phase 5 - Dwellings			255	2372						
Phase 5 - Commercial 800m2				88						
Phase 6 - Dwelling			195	1814						
Phase 7 - Dwelling			245	2279						
Phase 8A - Dwelling			297	2762						
Phase 8B - Dwelling			234	2176						
School lighting				292						
				150						
Total										
Anticipated site-wide total				17478						

Site phasing layout

