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Revised 2018-2033 Local Development Plan

Topic Paper Minerals





Contents

1.0	Introduction	1
2.0	Legislative and Policy background	1
3.0	Local evidence	7
4.0	Dormant Sites	.13
5.0	Mineral Safeguarding	.14
6.0	Buffer zones around mineral sites with extant planning permission	. 15
7.0	Restoration and aftercare	. 15
8.0	Transportation	.16
9.0	Candidate Sites	.16
10.0	Promoting the Circular Economy	.17
11.0	Implications of major projects	. 18
12.0	Marine-won sand and gravel	. 19
13.0	Energy Minerals	. 19
14.0	Coal Mining Legacy	. 20
15.0	Summary and conclusions	.21
Appen	dix 1: Minerals Sites within Carmarthenshire	.24

1.0 Introduction

1.1 The Welsh Government agreed the Delivery Agreement (DA) for the Revised Carmarthenshire Local Development Plan (LDP) on 28th June 2018. This followed the formal public consultation on the DA which closed on the 23rd March 2018 and the subsequent reporting of the Draft DA and the representations received to the meeting of Council on the 13th June 2018. This paper has been prepared to help inform the strategy on future minerals development for the Revised LDP.

1.2 The paper identifies the requirements of national legislation and policy relating to minerals. It also sets out regional evidence, primarily prepared by the South Wales Regional Aggregates Working Party (SWRAWP), as well as local evidence including the ongoing monitoring carried out as part of the LDP.

1.3 The paper should be read in conjunction with Welsh Government's planning policy on minerals. This is set out in Planning Policy Wales Edition 11 and a related series of Minerals Technical Advice Notes.

1.4 The regional position on minerals planning is presented in the Regional Technical Statements (RTS) for Aggregates for North Wales and South Wales 2nd Review (RTS2). An important supplementary source of information is the series of SWRAWP Annual Reports. These are based on regular surveys completed by minerals operators.

1.5 Mineral extraction includes all minerals and substances in, on, or under land. Extraction may take place through underground or surface working. Minerals development is different from other forms of development because:

a) It can only take place where a mineral is found;

b) It is not a permanent land use, although operations may take place over a long period;

c) It will often have environmental and amenity impacts, which should be avoided if possible (where this is not possible, impacts must be monitored and controlled with care);

d) Once operations have ceased, land needs to be reclaimed to a high standard and to a beneficial after-use.

1.6 The ongoing need for extraction of a variety of minerals to meet society's needs has to be considered alongside the need to protect finite resources and to protect amenity and environment.

2.0 Legislative and Policy background

National Policy in Wales

2.1 The Welsh Government's Planning Policy in respect of minerals is set out in Planning Policy Wales (PPW), edition 11, February 2021. This latest edition reflects

the provisions of the Well-being of Future Generations (Wales) Act, 2015. Several Minerals Technical Advice Notes (MTANs) remain alongside PPW.

2.2 PPW sets out a number of requirements for Development Plans relating directly to minerals, including the safeguarding of economic mineral resources. This anticipates a possible need for their use by future generations. Maps prepared by the British Geological Survey (BGS) provide the basis for mineral resource safeguarding in the Council's planning area. Safeguarding of the economic mineral resource forms an element of the current adopted LDP. This will need to be carried forward into the Revised LDP. However, a recent change to Welsh minerals safeguarding policy means that the requirement to safeguard the primary coal resource of the Plan has been removed, although Local Planning Authorities (except in National Parks) may still choose to do so.

2.3 PPW also advises that Minerals proposals within or likely to affect Sites of Special Scientific Interest and National Nature Reserves, potential and classified Special Protection Areas, designated candidate or proposed Special Areas of Conservation or Ramsar sites must be carefully examined under the terms set out in paragraph 5.14.37. Similarly, mineral proposals within the setting of a Scheduled Ancient Monument (SAM) need careful consideration.

2.4 There is additional Welsh Government guidance on minerals planning in:

a) Minerals Technical Advice Note 1 – Aggregates (March 2004); and b) Minerals Technical Advice Note 2 – Coal (January 2009).

2.5 MTAN 1 advises on delivery of aggregates extraction policies by Mineral Planning Authorities and by the aggregates industry. It also explains the purpose of buffer zones around quarries. Minimum distances for these are 100m for sand and gravel and 200m for hard rock. MTAN 2 provides similar advice on coal extraction. In this case, the minimum buffer zone distance is 500m.

2.6 The focus of this paper is on land-won hard rock, and superficial sand and gravel. The basis for the provision of these resources across South Wales is set out in RTS2, which is discussed in more detail below.

Regional policy

The Regional Technical Statement for Aggregates 2nd Review for North Wales and South Wales (RTS2)

2.7 Minerals Technical Advice Note 1: Aggregates (2004) (MTAN 1) requires the preparation of Regional Technical Statements (RTS) for the areas covered by both the South Wales and North Wales Regional Aggregates Working Parties (RAWPs). The original RTS documents for both regions were completed in 2008 and are required, by MTAN 1, to be reviewed every five years. The First Review was undertaken in 2013/2014, and the Second Review commenced in 2018.

2.8 RTS2 was published in September 2020. It provides specific recommendations to the constituent LPAs regarding the quantities of aggregate which need to be supplied from each area (apportionments) and the nature and size of any allocations which may need to be made in their Local Development Plan (LDP) to ensure that adequate provision is maintained throughout the relevant Plan Period.

2.9 RTS2 post-dates adoption of the Council's LDP. Its provisions have been taken into consideration in preparing the Revised LDP.

2.10 The approach taken to apportionment of hard rock by RTS2 is different to that of its predecessor. A single authority approach has been replaced by a joint reserve approach as with sand and gravel.

2.11 For hard rock, Carmarthenshire forms part of the Swansea City Sub-region, along with the local authorities of Swansea and Neath Port Talbot. A statement of sub-regional collaboration (SSRC) has been produced which demonstrates how the constituent Authorities satisfy the requirements of RTS2 in respect of future crushed (hard) rock provision.

2.12 In terms of sand and gravel provision, it must be noted that the First Review of the RTS (RTS1) suggested that there would be merit in developing a combined approach to future apportionments and allocations between Pembrokeshire, Ceredigion and Carmarthenshire. Although Carmarthenshire is in a separate sub-region (primarily because of the market for crushed rock in the Swansea area), it is recommended in RTS2 that these joint working arrangements [suggested in RTS1] should continue, with regard to sand & gravel. Therefore, a joint approach is being pursued by Pembrokeshire, Ceredigion and Carmarthenshire for the provision of the allocation requirement over the period up to 2038.

2.13 The joint reserve approach to future supply requires collaborative working. This has happened for some time through the South Wales Regional Aggregates Working Party (SWRAWP). There is also a Planning Officer Society for Wales (POSW) Minerals and Waste Planning Group, which considers strategic issues relating to these topic areas.

2.14 In addition to the above, a South West Wales Minerals Planning Group has been set up. This comprises representatives of, Carmarthenshire, Ceredigion and Pembrokeshire County Councils, and the Pembrokeshire Coast National Park Authority. Its main purpose is to ensure an adequate supply of hard rock and sand and gravel in SW Wales. It is also seeking, in line with Welsh policy, to reduce and eventually eliminate aggregates extraction within the Pembrokeshire Coast National Park.

2.15 There are plentiful supplies of hard rock in South West Wales in non-National Park locations. There is current production of high specification aggregate in Carmarthenshire, including several hard rock quarries producing high quality sandstone, as well as limestone, which is a raw material for many industries.

2.16 In contrast, for sand and gravel, supplies in South West Wales are not plentiful. Current terrestrial sand and gravel production in SW Wales is primarily at quarries in the Pembrokeshire Coast National Park and in Ceredigion. However, the sand and gravel resource extends into other locations in the region. What is uncertain is whether production at these alternative locations would be economically feasible. New terrestrial production sources for sand and gravel now need to be found. This will ensure adequate sand and gravel supplies are maintained in the Region in the long term.

2.17 Marine-won sand and gravel supplies landed at wharfs and marine landing sites within SW Wales make a modest contribution to meeting regional needs. They will continue to do so in the future. However, these supplies do not remove the need to find new terrestrial sand and gravel production sites in the region.

2.18 RTS2 also advises that existing and potential new wharves and rail heads should be identified for safeguarding by LDPs. There is an existing sand and gravel facility at Burry Port, which is safeguarded by the current LDP. Landings are of a modest scale and have fluctuated in volume in recent years. These landings contribute to the overall provision of sand and gravel in the County and in SW Wales. The materials landed are dredged from sites in the Bristol Channel. On the basis of the RTS2 requirement, the safeguarding of Llanelli Sand & Dredging's Burry Port facility will be carried forward into the Revised LDP.

The South Wales Regional Aggregates Working Party

2.19 Carmarthenshire County Council is a member of the South Wales Regional Aggregates Working Party (SWRAWP). This organisation is responsible for preparing the RTS, as discussed above. The SWRAWP comprises representatives from local authorities and the minerals industry, together with Welsh Government and Natural Resources Wales.

2.20 As well as preparing the RTS, the SWRAWP also prepares Annual Reports, the most recent of which is for 2020 (published May 2023). The report covers both terrestrial production and production of marine-won aggregates. It divides the resource into two main categories, known as a) crushed rock (hard rock) and b) sand and gravel.

2.21 Some of the key conclusions in relation to Carmarthenshire and SW Wales are set out in the tables below. Each is derived from the Annual Report published in May 2023:

Crushed rock reserves and landbanks on 31/12/2020 by Mineral Planning Authority (million tonnes) based on 3-year average sales 2018-2020

Region	Region Mineral Planning	Crushed Rock Reserve 31/12/2020	Average Annual Sales 2018- 2020	Landbank (years) based on 3-year sales average
South West Wales	Carmarthenshire	62.92	0.80	>50
	Neath Port Talbot	15.38	0.36	43
	Pembrokeshire			39
	Pembrokeshire Coast National Park	25.15	0.50	N/A
	Ceredigion	5.42	0.11	36
	Swansea	0	0	0

2.22 The table above confirms that there is a significant reserve of crushed rock in Carmarthenshire. In the context provided by average annual sales over a 3-year period, there is a crushed rock landbank for Carmarthenshire of more than 50 years.

Crushed rock reserves and landbanks at 31/12/2020 by Mineral Planning
Authority (million tonnes) based on 10-year average sales 2011-2020

Region	Region Mineral Planning	Crushed Rock Reserve 31/12/2020	Average Annual Sales 2011- 2020	Landbank (years) based on 10-year sales average
South West Wales	Carmarthenshire	62.92	0.78	>50
	Neath Port Talbot	15.38	0.35	43
	Pembrokeshire			39
	Pembrokeshire Coast National Park	25.15	0.52	N/A
	Ceredigion	5.42	0.15	36
	Swansea	0	0	0

2.23 The table above provides further confirmation that there is a significant reserve of crushed rock in Carmarthenshire. In the context provided by average annual sales over a 10-year period, there is a crushed rock landbank for Carmarthenshire of over 50 years – as is the case using the 3-year period.

Crushed rock reserves at Dormant Sites by Mineral Planning Authority (million tonnes)

Region	Mineral Planning Authority	Crushed Rock Reserve 31/12/2020
South West Wales	Carmarthenshire	11.29
	Neath Port Talbot	0
	Pembrokeshire	0
	Pembrokeshire	
	Coast National Park	
	Ceredigion	0
	Swansea	0

2.24 The table above indicates that there are 11.29 million tonnes of crushed rock reserves at Dormant sites in Carmarthenshire. These reserves are not included within landbanks but can be used to offset against allocation requirements in an LDP provided an assessment of the likelihood of the future operation of the site concluded that it is likely to reactivate.

Land won sand and gravel reserves and landbanks by Mineral Planning Authority (million tonnes) based on 3-year average sales 2018-2020

Region	Mineral Planning Authority	Sand & Gravel Reserve 2020	Average Annual Sales 2018- 2020	Landbank (years) based on 3-year sales average
Powys (inc Brecon Beacons)				>50
South West Wales	Carmarthenshire	1.97	0.15	>50
	Ceredigion			6
	Pembrokeshire Coast National Park			N/A

Land won sand and gravel reserves and landbanks by Mineral Planning Authority (million tonnes) based on 10-year average sales 2011-2020

Region	Mineral Planning Authority	Sand & Gravel Reserve 2020	Average Annual Sales 2011- 2020	Landbank (years) based on 10-year sales average
Powys (inc Brecon Beacons)				>50
South West Wales	Carmarthenshire	1.97	0.21	>50
	Ceredigion			6
	Pembrokeshire Coast National Park			N/A

2.25 The tables above indicate the aggregated sand and gravel reserve in 2020 for Powys, Carmarthenshire, Ceredigion and the Pembrokeshire Coast National Park. The average annual production over the 3 years from 2018 to 2020, and over the 10 years from 2011-2020, indicates that there is a land won sand and gravel landbank of more than 50 years for Powys and Carmarthenshire and 6 years in Ceredigion. The Pembrokeshire Coast National Park is not required to hold a landbank. There is no current sand and gravel production in Pembrokeshire outside the National Park and hence there is no landbank figure.

2.26 Care must be exercised in relying on the landbank figures for Powys and Carmarthenshire as these are based on very small annual sales from relatively small sites. So although not immediately apparent from the tables, there is a need to find alternative sources of land-won sand and gravel in SW Wales. These should be outside the Pembrokeshire Coast National Park if possible.

3.0 Local evidence

Local Development Plans (LDPs)

3.1 Local Development Plans focus on provision for future working of land-won minerals. When considering what provision should be made for future quarrying of terrestrial primary aggregates, the following are taken into account:

a) The contribution of marine resources; and

b) The contribution of secondary aggregates.

3.2 However, neither marine resources nor secondary aggregates form a part of the landbank.

3.3 Local Planning Authorities (except in National Parks) are required to maintain landbanks of hard rock and of sand and gravel. Terrestrial locations are the normal source of crushed hard rock supplies. However, sand and gravel may be quarried from terrestrial locations or dredged from marine locations.

3.4 In Wales, the landbank in each Local Planning Authority area (except in National Parks) is expected to be sufficient to:

a) Cover the lifetime of the Local Development Plan; andb) Cover an additional 10 years for crushed hard rock and 7 years for sand and gravel – at the end date of the LDP.

3.5 In Carmarthenshire the landbank for hard crushed rock is plentiful, with a reserve of over 50 years, however the situation with sand and gravel is more complex because for the Revised LDP an approach based on a regional provision for SW Wales is likely to be followed, to accord with the approach set out in RTS2.

3.6 The above approach requires an agreement to be in place with neighbour Local Planning Authorities, in the form of one or more Statement(s) of Sub Regional Collaboration. Pembrokeshire, Carmarthenshire, Ceredigion and the Pembrokeshire Coast National Park Authority are in the process of preparing a Statement on landbased sand and gravel provision. A Statement for crushed (hard) rock has been completed between Carmarthenshire County, Swansea and Neath Port Talbot.

3.7 The Council's Revised LDP will remain in force until 2033, therefore the landbank requirement should be sufficient to last until 2043 for hard rock and 2040 for sand and gravel in the Council's planning area. However, due to the new approach set out in RTS2, the position for both sand and gravel, and crushed (hard) rock should take account of the combined reserves of the relevant authorities; these requirements will need to reflect a position that references more than that within Carmarthenshire County Council's area of planning jurisdiction. Hence the requirement is not for a single-authority landbank but for a reserve for a larger area.

3.8 Within Carmarthenshire, there are a number of active hard rock quarries and a smaller number of dormant quarries (see Appendix 1). However, there is only one active sand and gravel site within the County, at Llwynjack near Llandovery, and one dormant site at Glantowy. Candidate sites were submitted on both these sites in the invitation for sand and gravel sites as part of the preparation of the Revised LDP (discussed in section 9.0 below).

Local Development Plans in Carmarthenshire – an overview

3.9 Carmarthenshire County Council is required to maintain a minerals landbank for both hard crushed rock, and sand and gravel.

3.10 For the current LDP, for hard crushed rock paragraph 6.11.8 of the LDP records that there was

...a reserve of approx. 81 million tonnes and a consequent 73.6 years of landbank at a base date of December 2008...

3.11 For sand and gravel, paragraph 6.11.12 of the LDP stated that:

'The position for land won Sand and Gravel is not as clearly defined ... In theory, Carmarthenshire has a landbank of almost 250 years, but this is based on a 500,000 tonnes reserve of river gravel (very little sand) which the operator uses at about 2,000 tonnes per year. This figure is not reliable enough to meet the sand and gravel requirements of Carmarthenshire over the period of the LDP.'

3.12 Specific information on the Council's LDP is presented below.

Carmarthenshire LDP (adopted December 2014)

3.13 Carmarthenshire County Council's current LDP has seven policies on minerals:

- Strategic Policy SP10 Sustainable Mineral Development;
- Policy MPP1 Mineral Proposals;
- Policy MPP2 Mineral Buffer Zones;
- Policy MPP3 Mineral Safeguarding;
- Policy MPP4 Coal Extraction Operations
- Policy MPP5 Aggregate Alternatives; and
- Policy MPP6 Restoration and Aftercare of Mineral Sites

3.14 Policy SP10 explains how provision will be made for a continuous supply of minerals through maintenance of an adequate landbank of reserves, through encouraging the efficient and appropriate use of minerals and through encouraging the re-use and recycling of suitable minerals as an alternative to primary won aggregates.

3.15 Policy MPP1 is a criteria based policy in accordance with which proposals for mineral extraction will be assessed. The purpose of the policy is to maintain a balance between meeting national demand for minerals and minimising the potential adverse effects that could arise from such operations.

3.16 Policy MPP2 makes provision for buffer zones around all sites with extant planning permission for mineral working in the County. Buffer zones have the dual purpose of protecting both the mineral extraction operations as well as the amenity of potential sensitive non-mineral development that borders the site.

3.17 Policy MPP3 safeguards mineral resources that have been identified on the BGS Mineral Safeguarding Maps for SW Wales. The policy contains a number of criteria that would need to be satisfied where development proposals for non-mineral activities are proposed within a safeguarding area.

3.18 Policy MPP4 sets out where coal extraction operations would not be acceptable. This includes generally within 500 metres of the development limits of

settlements and within international and national designations of environmental and/or cultural importance.

3.19 Policy MPP5 supports proposals which facilitate the use of secondary aggregate or recycled materials by the construction industry. Construction, demolition and excavation wastes in particular offer a significant potential source of alternative aggregate material. The policy requires applicants to demonstrate that a sequential approach has been considered, with existing mineral or appropriate construction sites being the most favoured locations.

3.20 Policy MPP6 requires proposals for mineral working to make provision for the restoration and after-care of the land and for its beneficial re-use and enhancement.

Annual Monitoring of the LDP

3.21 Progress towards delivery of the Council's LDP policies and proposals is monitored on an annual basis. There are now seven LDP Annual Monitoring Reports (AMRs) for the Carmarthenshire LDP, these forming part of the evidence base for the Revised LDP.

3.22 Drawing on the conclusions of the seven AMRs for the current LDP, it is apparent that the targets set out have been consistently met. No permanent sterilising developments have been granted planning permission within mineral buffer zones around sites with extant permission for mineral development, or within areas that have been safeguarded for their mineral resources. The Council also consistently maintains a minimum aggregate landbank of 10 years for hard crushed rock, and reviews on an annual basis the need to serve prohibition orders on dormant sites.

In terms of land won sand and gravel however, whilst the AMRs show that 3.23 sufficient landbank capacity exist jointly between Carmarthenshire, Ceredigion and Pembrokeshire for the current LDP period (to 2021 + 7 years), the figure is not sufficient to meet the sand and gravel landbank requirements for the Revised LDP (to 2033). RTS2 establishes that there is a landbank deficit and that consequently new sites for extraction of land-won sand and gravel will be needed in SW Wales. Minerals operators were formally notified of this need following publication of RTS1, in conjunction with the SWRAWP minerals survey in 2017 and 2018. Until recently, no expressions of interest in bringing forward new terrestrial sand and gravel sites had been forthcoming. However, in 2019 Carmarthenshire County Council received two Candidate Sites for sand and gravel quarries. Pembrokeshire County Council also received three Candidate Sites for new sand and gravel guarries. These sites will be evaluated (as part of the LDP process) to determine whether they have potential to meet the future regional need for sand and gravel (see section 9.0 below).

3.24 Mineral working within the Council's planning area is presented in Appendix 4 of the Deposit Revised LDP (and below in Appendix 1 to this topic paper). This reflects the position at the time of writing, and updates the position as identified in Appendix 5 of the current LDP.

Revised LDP (2018-2033)

3.25 Carmarthenshire County Council published a Preferred Strategy for its Revised LDP in December 2018. This included a draft Strategic Policy on Minerals, SP18 Mineral Resources. The Policy was modified in the Second Deposit Revised LDP which was published for consultation in early 2023. Importantly, due to the uncertainty of the potential future landbank of sand and gravel within the combined authorities of Carmarthenshire, Pembrokeshire and Ceredigion, Policy SP18 includes an 'Area of Search' for Sand and Gravel which will form the basis for future exploration and production in order to satisfy the broader subregional requirements. The Policy also sets out the different approach to regional apportionment as outlined above in paragraphs 2.7 - 2.12, which has come about as a result of the provisions of RTS2.

3.26 The Deposit Revised Plan also includes the following 3 minerals policies:

MR1: Mineral Proposals

A criteria based policy setting out criteria with which proposals for mineral extraction will be assessed. Its purpose is to maintain a balance between meeting national demand for minerals and minimising the potential adverse effects that could arise from such operations.

MR2 Mineral Buffer Zones

Provides areas of protection around permitted and proposed mineral workings where new development which would be sensitive to adverse impact, including residential areas, hospitals and schools, should be resisted.

MR3 Mineral Safeguarding Areas

Safeguards mineral resources that have been identified on the BGS Mineral Safeguarding Maps for SW Wales. The policy contains a number of criteria that would need to be satisfied where development proposals for non-mineral activities are proposed within a safeguarding area

The Deposit Plan sets out the active, inactive and dormant mineral sites within the County. Appendix 1 below lists these sites. The following table sets out the dates on which mineral extraction will end at the quarries. The latest position (2020) is presented below:

Site Name	Mineral Type	Mineral Extraction will end:	
Blaenyfan	Limestone	21 Feb 2042 (currently inactive)	
Coygen	Limestone	21 Feb 2042	
Crwbin	Limestone	21 Feb 2042	
Torcoed	Limestone	31 Dec 2055	
Garn Bica	Limestone	21 Feb 2042	
Limestone Hill	Limestone	21 Feb 2042 (Dormant)	
Llwynyfran	Limestone	21 Feb 2042 (Dormant)	
Maesdulais	Limestone	21 Feb 2042 (Dormant)	
Penybanc	Limestone	21 Feb 2042 (Dormant)	
Pwllymarch	Limestone	21 Feb 2042 (Dormant)	
Ty'r Garn	Limestone	21 Feb 2042 (Dormant)	
Cerrig-yr-wyn	Igneous	21 Feb 2042 (Dormant)	
Pennant	Sandstone	30 Jan 2030	
Alltygarn	Sandstone	21 Feb 2042 (currently inactive)	
Cynghordy	Sandstone	21 Feb 2042 (Dormant)	
Dinas	Sandstone	31 Dec 2070 (currently inactive)	
Garn	Sandstone	21 Feb 2042 (Dormant)	
Garn Wen	Igneous	21 Feb 2042	
Llwynjack	Sand & Gravel	21 Feb 2042	
Glantowy	Sand & Gravel	21 Feb 2042 (Dormant)	
Foelfach	Gritstone	15 Aug 2034	

Source: South Wales SWRAWP Report 2020 (Published May 2023)

3.27 Excepting the dormant sites, the quarries listed above are all producing hard rock (or sand & gravel) of some sort and contribute towards the hard crushed rock and sand & gravel landbanks.

3.28 Nine of the sites in the table above are identified as being Dormant. In these cases, use of Prohibition Orders might be appropriate, as there is little likelihood of re-commencement of quarrying activity in the Revised LDP plan period. Prohibition Orders can be used to ensure that no further extraction of minerals takes place without a further planning permission being issued. Serving of such Orders takes place outside LDP procedures.

3.29 The locations of the quarries listed above are identified on the Deposit Revised LDP Proposals Map and are listed within an appendix in the Plan.

Other Local Development Plans in SW Wales:

Ceredigion

3.30 In Ceredigion, there is current terrestrial sand and gravel production at four sites:

- a) Cardigan Sand and Gravel at Penyparc;
- b) Pant, near Llanddewi Brefi;
- c) Crug-yr-Eryr, near Talgarreg; and
- d) Glanyrafon, near Aberystwyth.

3.31 The current Ceredigion LDP allocates extensions for sites a) and b). At Cardigan Sand and Gravel a 12.79ha extension is envisaged, while at Pant the extension proposed is for 3.18ha. It should not be assumed that, beyond existing commitments, Ceredigion would have further capacity to supply sand and gravel to meet the SW Wales requirement.

Work on the Revised LDP is currently on hold due to matters relating to Phosphate levels in Riverine Special Areas of Conservation.

Pembrokeshire County Council and Pembrokeshire Coast National Park

3.32 In Pembrokeshire, only Pembrokeshire County Council is required to maintain a minerals landbank. The Pembrokeshire Coast National Park Authority is not required to do so. However, there is minerals production in Pembrokeshire in both National Park and non-National Park locations.

3.33 In Pembrokeshire County Council's area of planning jurisdiction, there are several active quarries and a smaller number of dormant quarries. In the Pembrokeshire Coast National Park, there are also active quarries. The long term objective is for National Park minerals production to cease, although this will not happen immediately, as there are active quarries operating under current consents. There are alternative sources of hard rock in Pembrokeshire and in South West Wales.

3.34 However, the National Park quarries at Trefigin and Pant Gwyn are the only active sand and gravel production sites in Pembrokeshire and within the SW Wales region there are few alternative terrestrial production sites. Future consenting of minerals production within the Pembrokeshire Coast National Park Authority will only occur in very exceptional circumstances.

4.0 Dormant Sites

4.1 The way in which dormant sites are treated has changed recently. Mineral Planning Authorities are now asked to assess the likelihood of each such site being worked in the Plan period, subject to the completion of an initial review of planning conditions and submission of an Environmental Impact Statement.

4.2 Where a likelihood of re-commencement of activity at a dormant site is the conclusion, then the likely production from the site(s) in question may be offset against the need for future allocations. In other words, if recommencement of activity at a currently dormant site is likely, then this will reduce or eliminate the need to make new minerals allocations elsewhere.

4.3 There are a number of dormant sites within Carmarthenshire. Preparations for the issue of Prohibition Orders have already commenced at 5 of the sites, and should be served in 2022-23. However, if there is a likelihood of the recommencement of quarrying during the Plan period at a dormant site, then the likely production from that site can be offset against any need for future allocations.

5.0 Mineral Safeguarding

5.1 Mineral resources with economic potential are safeguarded for the future. The approach to protection of these resources for future generations is embedded in the current LDP, in line with Welsh policy guidance. While the hard crushed rock and sand and gravel safeguarding requirements remain in place, the previous requirement to also safeguard the primary coal resource has now been removed from Welsh planning policy. The option to safeguard the primary coal resource is, however, still available to local planning authorities.

5.2 The Welsh Government commissioned the British Geological Survey to undertake a study into minerals safeguarding areas. Known as the National Mineral Map and Aggregate Safeguarding Map Project for Wales, the Study is now complete and local authorities have been issued with the *National Mineral Resources of Wales* Dataset, as well as the *Aggregate Safeguarding Map for Wales*. The aggregate safeguarding maps have been compiled to assist Mineral Planning Authorities (MPAs) in the delineation of aggregates safeguarding areas in LDPs, and it is this dataset that has been used in the current Carmarthenshire LDP, and has been carried forward into the Revised LDP where they will be identified on the Proposals maps.

5.3 It must be emphasised that the safeguarding of a mineral resource does not necessarily indicate an acceptance of working, merely that the location of the resource is known. **Mineral resources** are natural concentrations of minerals which might now, or in the foreseeable future, be of economic value. A **mineral reserve** on the other hand is that part of a mineral resource that is economic to work and has been fully evaluated on a systematic basis by drilling and sampling and is free from any legal or other obstruction that might inhibit extraction.

5.4 Policy MPP3, as stated above, covers the safeguarding of mineral resources in the current adopted LDP, and similarly Policy MR3 covers the matter in the Deposit Revised LDP. In allocating sites (for example housing) within the current LDP, the Council considered the impact on minerals resources within safeguarding areas and site allocations within these areas were considered to be justified. Similarly for the Revised LDP, new allocations have been assessed for potential impacts upon minerals safeguarding areas and are considered to be justified for the reasons listed below. However, development proposals on these allocations will still need to be considered against the new safeguarding policy, and prior extraction of the resource before development should be considered. The justification for allocating sites affected by minerals safeguarding is considered to be:

(i) the overriding need for the development (to meet housing and employment needs);

(ii) the logical location of sites (adjoining existing settlements with services/facilities);

(iii) the availability of appropriate alternative sites in that area given the extent of safeguarded resources in the area;

(iv) the likelihood of having a significant impact on the resource (i.e. the area is already largely sterilised given the proximity to existing sensitive development, such as residential areas) including the consideration of the potential of working from an existing or new quarry; and / or,

(v) the site in question has an extant planning permission.

6.0 Buffer zones around mineral sites with extant planning permission

6.1 Quarry buffer zones are used to ensure that conflicts between minerals workings and other nearby land uses are avoided, or if this is not possible, minimised and mitigated. These zones surround operational and dormant mineral working sites. Within such zones, there should be no new mineral extraction or new sensitive development, although some types of less sensitive development may be possible. There is an exception to this general approach, where the site of the new development in relation to the minerals operation is within or on the far side of an existing built up area that already encroaches on the buffer zone. In that context, there are some current minerals production sites in the Council's area of planning responsibility that have buffer zones extending over existing built up areas.

6.2 Where extensions to minerals sites are proposed (or have been consented since the current LDP was adopted) and environmental and amenity considerations can be mitigated, buffer zones will need to be adjusted accordingly.

7.0 Restoration and aftercare

7.1 Where new proposals for mineral extraction are put forward, these should include arrangements for high quality restoration and aftercare. Applications that do not do this are likely to be refused.

7.2 Restoration and aftercare should maintain and if possible enhance the quality of land and landscapes taken for mineral extraction. Some worked-out sites may also be able to provide opportunities for creating and / or enhancing nature conservation schemes.

7.3 Phasing of restoration activities is increasingly being used as a means of reducing the potential environmental damage that might result from a failure to restore. In addition, operators and landowners of minerals sites are expected to set aside sufficient finance to enable them to meet future restoration and aftercare obligations. However, there is unlikely to be a requirement for them to cover the whole cost of restoration from the outset.

8.0 Transportation

8.1 Transportation considerations are also of great importance in assessing minerals proposals. The Welsh Government's preference is for movement of minerals to be via the rail network or by water wherever economically feasible. However, if transportation of minerals by road is the only feasible option, then the routes used must be shown to have sufficient capacity to deal safely with the movement of the minerals and related products. In rural areas, this may be particularly challenging and a Traffic Impact Assessment is likely to be required to accompany a planning application. Section 106 agreements and planning conditions can sometimes be used to ensure an appropriate means of controlling routes but greater control exists in relation to access, design and signage.

9.0 Candidate Sites

9.1 The Revised LDP Candidate Site process provided an opportunity for landowners and minerals operators to put forward possible sites for future minerals extraction. However, whilst a large number of candidate sites were received during the process, none of these related to minerals development.

9.2 In light of the situation set out above concerning sand and gravel reserves over the Plan period (to 2033), it was considered prudent to engage in a second more focussed candidate site period, this time specifically inviting landowners/minerals operators to put forward any sites that could potentially be allocated for sand and gravel extraction in the Revised LDP. This exercise ran concurrently with the consultation on the Revised LDP Preferred Strategy which closed on 8th February 2019.

9.3 The exercise yielded the submission of two sites, both of which are already existing sand and gravel sites that are allocated (and identified with associated buffer zones on the Proposals Map) within the current LDP. Llwynjack is an active operation (Towy Sand and Gravel), located close to Llandovery. The other site submitted, Glantowy is close to Llwynjack but is currently classed as dormant. The

scale of production at Llwynjack is relatively small and has already been factored into the RTS 1st Review figures whereby the deficit of 2.94 million tonnes of sand and gravel was calculated for the SW Wales region up to 2033. Whilst ithe two candidate sites for sand and gravel will be taken forward as allocations in the Revised LDP, the issue of the deficit in reserves will need to be addressed (see paragraph 9.5).

9.4 As noted above, the landbank for sand and gravel for Carmarthenshire has been combined with Ceredigion, Pembrokeshire County Council (PCC) and Pembrokeshire Coast National Park (PCNP). PCC carried out a similar candidate site exercise and this yielded three candidate sites for sand and gravel. A minerals operator has put one of these forward, suggesting an extension of an existing sand and gravel quarry in the PCNP into PCC's planning area. The other two submissions have been put forward by the County Council's Property Team, also proposing sand and gravel quarrying, on Council owned land within the sand and gravel resource area. These submissions will initially be subject to the Council's standard Site Assessment process, however, because minerals developments are uncommon, can only take place where the mineral is found and require specialist knowledge at the assessment stage, additional expert advice will be sought where necessary.

9.5 If the Candidate Sites submitted for sand and gravel within PCC are found to be suitable, the Authority will look to the potential to make allocations in their Revised LDP. However, notwithstanding the potential landbank that could result from these candidate sites, as noted above (paragraph 3.25) the authorities of Carmarthenshire, Pembrokeshire and Ceredigion, have agreed on potential 'Areas of Search' for Sand and Gravel which will form the basis for future exploration and production in order to satisfy the broader subregional requirements. One of these areas straddles the borders of Carmarthenshire and Pembrokeshire and has been identified on the Carmarthenshire Deposit Revised Plan.

Further issues to consider

10.0 Promoting the Circular Economy

10.1 A key element within PPW 11 is the move towards embracing a more circular economy in Wales. A circular economy is one which aims to keep materials, products and components in use for as long as possible. There are environmental, social and economic benefits of taking such an approach, most notably the increased value and productivity of materials, financial savings for the construction sector and the prevention of waste.

10.2 A policy specific to this topic has been included within the Deposit Revised LDP as follows:

PSD5 – Development and the Circular Economy

Development proposals will be required to demonstrate, via the submission of a natural materials management plan, how the generation of waste has been minimised

and any waste generated managed in order to keep resources in use for as long as possible in:

- 1. the layout and design of the development;
- 2. any demolition and construction phase;
- 3. respect of any opportunities for utilising waste for re-use and recycling;

4. respect of any opportunities for utilising residual waste as a source of fuel.

10.3 The policy seeks to encourage development proposals that incorporate design features and materials which enable flexibility and adaptability throughout the design life of a building and which will enable re-use of the materials upon deconstruction.

10.4 Where appropriate, the policy encourages the use of locally sourced, alternative or recycled materials, including the reuse and recycling of secondary aggregates, construction, demolition and excavation waste, incinerator bottom ash and other appropriate recycled materials.

10.5 The policy looks to the contribution that the construction industry can make in the move towards circularity. Construction sites inevitably require a degree of cut and fill engineering operations. As part of site treatment, the cut and fill balance of materials excavated should be assessed so as to avoid the creation of waste which cannot be effectively re-used due to lack of suitable storage facilities. As part of the natural materials management plan, developers should design proposals to achieve an earthwork balance which seeks to minimise cut and fill or which may provide for remediation of land elsewhere in the area.

10.6 The policy will assist the Planning Authority in encouraging innovative approaches to recycling, particularly those which bring multiple benefits such as reducing energy costs and associated emissions. This may include the practice of on-site recycling on minerals sites and the recycling of construction and demolition waste in conjunction with other suitable uses, such as within builder's merchant yards.

11.0 Implications of major projects

11.1 Aggregates underpin economic growth, providing construction related products essential for the delivery of placemaking, housing and infrastructure. When construction leads to a spike in demand, caused for instance by major infrastructure projects, pressures are placed on the minerals industry to provide the necessary materials. A reliable supply of minerals, capable of meeting demand in all regions of Wales simultaneously, is vitally important. Furthermore, it is possible that major projects in England might also need to source minerals from Wales from time to time. It is therefore important that effective planning ensures a good stock of permitted reserves is available to supplement existing productive capacity at any given time.

11.2 The Welsh Government published its National Development Framework – *Future Wales: The National Plan 2040* in February 2021. In this they emphasise that a co-ordinated framework for minerals extraction is necessary, in conjunction with waste treatment and disposal as well as promoting the circular economy. The WG believes that these topics are particularly conducive to be covered by Strategic Development Plans (SDPs), and they require SDPs to come forward in each of the three regions to deliver these requirements.

12.0 Marine-won sand and gravel

12.1 As marine-won sand and gravel is of importance in supplying material to the South West Wales market, consideration therefore needs to be given to the provisions of the Welsh National Marine Plan (WNMP, 2019). The document includes Sector Policies for marine-won aggregates, and indicates that marine sourced aggregate is expected to continue to dominate supplies of sand and gravel in Wales compared to other sources. The availability of resources, proximity to markets and presence of infrastructure suggests that marine sand resources in the Bristol Channel, Severn Estuary and off North Wales are likely to provide for a good level of supply of marine aggregates to meet anticipated demand over the term of the Plan (paragraph 259). It also notes that areas of potentially viable aggregate resource have been identified off West Wales and North Wales, adding that these could provide a supply for at least another 50 years. However, this does not override the need to also find new sources of land won sand and gravel production in Wales, including South West Wales.

13.0 Energy Minerals

13.1 The Welsh Government has set challenging targets for decarbonisation and increased renewable energy generation. The continued extraction of all fossil fuels, including shale gas, coal bed methane and underground coal gasification, are not compatible with those targets. The Welsh Government's policy objective is therefore to avoid the continued extraction and consumption of fossil fuels. When proposing the extraction of on-shore oil and gas, robust and credible evidence will need to be provided to the effect that proposals conform to the energy hierarchy, including how they make a necessary contribution towards decarbonising the energy system. In terms of the Revised LDP, minerals policies aimed at preventing and limiting the environmental impacts of extraction and ensuring restoration will apply, and there will be no requirement to provide a specific policy covering this type of mineral extraction activity, or to identify coal resources on the LDP Proposals Map.

13.2 The **extraction of gas and oil** whether by **conventional** or **unconventional** methods is classed as mineral development and onshore activities under relevant oil and gas licences must be carried out in accordance with the requirements of planning permission. Several licences have been issued in Wales but no significant

oil and gas production has been undertaken. Unconventional oil and gas proposals for coalbed methane, shale gas and underground coal gasification are subject to Notification Directions requiring that all such development proposals be referred to the Welsh Government for consideration should the planning authority be minded to approve the application.

13.3 With regard to **Coal**, it is part of the UK and Welsh Government's energy policy to remove coal from energy generation, and in Wales demanding targets to limit carbon emissions are enshrined in the Environment Act. PPW 11 establishes that proposals for opencast, deep-mine development or colliery spoil disposal should not be permitted. If, in wholly exceptional circumstances, proposals are received they would need to demonstrate clearly why they are needed in the context of climate change emissions reductions targets and for reasons of national energy security.

13.4 In wholly exceptional circumstances, there may be some public safety benefit in coal extraction where, for example, historic coal mining has created land instability. Further consideration to physical ground conditions and land instability is contained in Chapter 6 of PPW11 and further advice is contained in *MTAN 2 Coal*. Coal mining legacy issues are covered below.

13.5 In the current LDP primary and secondary coal resources have been safeguarded. PPW11 removes this requirement. PPW11 does give planning authorities, with the exception of National Parks, the option to safeguard primary coal resources depending on their individual circumstances. Should this be the case, then they would need to include appropriate policies, including those relating to pre-extraction, in their LDPs. Primary coal resources have not been safeguarded within the Deposit Revised LDP.

14.0 Coal Mining Legacy

14.1 Taking into account *MTAN2: Coal*, in particular paragraphs 244 to 250, the LDP will have to ensure that adequate consideration has been made to land instability and subsidence arising from past coal related activity. To this end, land instability has been covered in several sections of the Deposit Revised LDP.

14.2 Parts of Carmarthenshire have been subjected to coal mining which will have left a legacy. Whilst most past mining is generally benign in nature, potential public safety and stability problems can be triggered and uncovered by development activities. Problems can include collapses of mine entries and shallow coal mine workings, emissions of mine gases, incidents of spontaneous combustion, and the discharge of water from abandoned coal mines.

14.3 Within the Carmarthenshire area there are more than 3,600 recorded mine entries and around 110 coal mining related hazards. Mine entries may be located in built up areas, often under buildings where the owners and occupiers have no knowledge of their presence. Mine entries and mining legacy matters should be considered by the Local Planning Authority to ensure site allocations and other policies and programmes will not lead to future public safety hazards.

14.4 However, former mining activities and related hazards are not strict constraints on development; indeed in many cases it would be preferable for appropriate development to take place in order to remove these public liabilities.

14.5 The Coal Authority (CA) has provided the Authority with maps of former mines entries, pin pointing areas within the County that are likely to pose greater risks. This data will assist the local planning authority in its day to day development management duties, as well as providing evidence that can be consulted in the preparation of the Revised LDP. Indeed the Coal Authority submitted a representation to the Revised LDP Preferred Strategy whereby they advised that any sites being considered for allocation (in coal legacy areas) should be assessed against this information.

15.0 Summary and conclusions

15.1 Various matters needed to be considered in conjunction with the review of the minerals policies and proposals for the Revised LDP, as set out below.

15.2 Welsh Government's minerals policies are currently set out in Planning Policy Wales (PPW) edition 11 and in a series of Minerals Technical Advice Notes. The Revised LDP minerals policies and proposals have been set in the context provided by these documents.

15.3 The Revised LDP also reflects the approach of the RTS 2nd Review, which was approved in 2020.

15.4 Local Planning Authorities (except in National Parks) are required to maintain landbanks of hard crushed rock and of sand and gravel. Hard crushed rock is normally land-won. However, sand and gravel can be land-won or marine-won.

15.5 The basic policy approach to minerals within the current adopted LDP has been carried forward into the Revised LDP, but has been updated where necessary to reflect contextual updates, including those in PPW 11 and those introduced through RTS2. The safeguarding of existing mineral resources has been rolled forward, but the safeguarding of primary coal resources will not be necessary in light of recent Welsh Government policy.

15.6 The Revised LDP has adopted a regional approach to the provision of both hard crushed rock and sand and gravel to reflect the requirements of RTS2. For sand and gravel, this will need the agreement of all neighbour Local Planning Authorities (Carmarthenshire County Council, Pembrokeshire County Council, Pembrokeshire Coast National Park and Ceredigion County Council). To this end, a Statement of Common Ground is in the process of being produced. For hard crushed rock, a SoCG has already been prepared and agreed for Carmarthenshire, Neath Port Talbot and Swansea.

15.7 Carmarthenshire's Revised LDP end-date is 2033 and hence the landbank requirement will need to be sufficient to last until 2043 for hard crushed rock and to 2040 for sand and gravel.

15.8 In terms of the regional approach to sand and gravel provision, areas of search have been identified within Pembrokeshire, Ceredigion and Carmarthenshire; the Deposit Revised Carmarthenshire LDP identifies one such area on its Proposals Map. This approach is in lieu of there being an insufficient provision of such resources within allocations and/or working mineral sites in the three authorities. The areas of search will form the basis for future exploration and production in order to satisfy the broader subregional requirements.

15.9 Some of the sand and gravel resources coming into South West Wales are marine won. There is a sand and gravel landing site at Burry Port from where a pipeline transports the material to the nearby facility owned by Llanelli Sand & Dredging. The material is sourced from the Bristol Channel. Both the landing site and the nearby facility have been safeguarded in the Deposit Revised LDP.

15.10 As marine-won sand and gravel is of importance in supplying material to the South West Wales market, consideration therefore needs to be given to the provisions of the Welsh National Marine Plan (WNMP, 2019).

15.11 There is a general need to be aware of the implications of major projects across South and South West Wales on mineral resources. *Future Wales: The National Plan 2040* (February 2019) notes major projects as an issue for minerals and requires that constituent authorities within each region within Wales establish Strategic Development Plans to cover minerals and the related topic of waste treatment and disposal.

15.12 There is a continuing requirement to safeguard existing quarry sites and to identify appropriate buffer zones around the quarry sites. Quarry buffer zones have been amended for the Deposit Revised LDP, where required, to reflect relevant changes since the current LDP was adopted.

15.13 There are plentiful supplies of hard crushed rock in Carmarthenshire. Whilst some sites have planning permissions that will expire within the Plan period, the landbank of reserves will remain sufficient so that there will be no need to allocate new sites within the Revised LDP. Criteria-based policies have been included within the Deposit Revised Plan to provide a basis for evaluation of potential minerals proposals on unallocated sites.

15.14 At the eight dormant mineral sites, Prohibition Orders may be appropriate. Preparations for the issue of Prohibition Orders have already commenced at 5 of the sites, and should be served in 2022-23. However, if there is a likelihood of the recommencement of quarrying during the Plan period at a dormant site, then the likely production from that site can be offset against any need for future allocations.

15.15 The Welsh Government's stance on promoting the principles of the circular economy has been addressed during preparation of the Deposit Revised LDP and a specific policy to support this has been included.

15.16 The Council will continue to use the BGS 2012 minerals safeguarding maps as a basis for safeguarding of the economic mineral resource in the Plan area. However, the previous requirement to include safeguarding of the primary coal resource has now been removed from Welsh planning guidance.

Appendix 1: Minerals Sites within Carmarthenshire

LDP Reference	Quarry Name	Site Status	Mineral Extracted
M1	Alltygarn	Inactive	Silica Sandstone
M2/M3	Garn Bica/Maesdulais	Active	Limestone
M4/M5/M6	Torcoed/Torcoed Fawr/Crwbin	Active	Limestone
M7	Blaenyfan	Inactive	Limestone
M8	Pennant	Active	Sandstone
M9	Coygen	Active	Limestone
M10	Garn Wen	Active	Igneous
M11	Dinas	Inactive	Sandstone
M12	M12 Llwynjack Farm		River Shoal/ Sand and Gravel
M13 Glan Lash Opencast Coal Site		Inactive	Opencast Coal
M14	M14 Foelfach		Sandstone
M15 Llanelli Sand Dredging Ltd ¹		Active	Marine Sand

Dormant Sites

LDP Reference	Quarry Name	Site Status	Mineral Extracted
M16	Pwllymarch	Dormant	Limestone
M17	Llwynyfran	Dormant	Limestone
M18	Tyr Garn	Dormant	Limestone
M19	Garn	Dormant	Sandstone
M20	Limestone Hill	Dormant	Limestone
M21	Penybanc	Dormant	Limestone
M22	Cynghordy	Dormant	Sandstone
M23	Glantowy	Dormant	Sand and Gravel

¹ Operations do not involve the extraction of minerals and so no buffer zone is required around the site. Also safeguarded is the marine landing site situated approximately 800m to the east of the Llanelli Sand Dredging site due to its importance in the landing of marine sand.