

Swansea Canal

Clydach to Pontardawe Playing Fields

Restoration Feasibility Study

Swansea Canal Society

2013



# Swansea Canal

## Clydach to Pontardawe Playing Fields

### Restoration Feasibility Study

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Funding: Inland Waterways Association

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*Town Planning, Transport Planning, Waterway Regeneration*

## Executive Summary

This report, prepared by Moss Naylor Young Limited, has been commissioned by the Swansea Canal Society to examine a proposal to restore the Swansea Canal between Clydach and Trebanos. It examines at outline level the practicality, cost and potential benefits of restoration of the Swansea Canal from Clydach to Trebanos. This length of approximately four kilometres is assessed as a free standing scheme although it could also form part of the restoration of a longer length of canal if that were to proceed.

This study has used as its core baseline document the Feasibility Report undertaken by WS Atkins in 2002.

The genesis of this latest project is an apparent opportunity to reclaim the line of the canal through a depot site just to the east of the town of Clydach. The restoration is straight forward from an engineering perspective: the only significant obstacle is the infilling of the canal route across the depot site, and the canal line is more or less clear across this. The works to conceal the lock have, as far as can be ascertained, also worked to preserve it.

Re-excavation of the canal and the lock would result in a continuous waterway linking the canal either side of the site. This would have an adjacent towpath and the new Sustrans Cycle Route would follow this.

The overall cost of the scheme is estimated at some £6.3 million: the largest single cost is dredging, with a cost of £1.7 million plus additional costs which bring the overall sum for this item to £2.7 million. The next largest items are the two locks at Trebanos and re-establishing the route through the depot, each at around £1.2 million plus additional.

With regards to the specific proposals in this study, it can be concluded that both national and local planning policy are in support of restoration of the Swansea Canal between Clydach and Trebanos. Both the Neath Port Talbot UDP and Swansea UDP's offer protection to this line of the canal to allow future restoration and note the opportunity to create a major tourist attraction by reinstating and linking the network of canals and rivers in the area. Despite this, any specific proposals to reinstate the canal need to protect the areas wildlife, biodiversity and landscape assets and ensure there is no increased risk of flooding or pollution. It would be diligent of SCS to keep up to date with preparation of the emerging Local Development Plans and take part in consultation where opportunities are available.

Aside from increased visitor numbers and consequent visitor spend in the immediate area, the principle benefits are the tangible and intangible benefits of regeneration at the depot site and in the Clydach area. There is potential here to create a canal quarter that could lift the area in terms of

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social amenity as well as economically. Such an initiative has much to recommend it but only makes sense if the canal is restored to navigable condition. Simply recreating the canal across the depot site without improving the rest of the length would diminish any regeneration benefits.

At present day values the depot site is unlikely to come forward without assistance in terms of grant aid and similar. It is difficult to envisage the site as anything other than a low value use similar to its present use unless the canal is reinstated. The presence of the canal across the site makes any development over the line difficult.

The overall benefits can be summarised as an improvement in the visual and amenity value of the corridor, especially between Coed Gwilym and Clydach, to the benefit of local residents and visitors to the area. This improvement can be promoted by, and in turn used to encourage the regeneration of development sites in the Clydach area, most especially the depot and the canal side in the vicinity of Mond Lock.

Visitor benefits would come in the form of increased activity leading to extra spend within the area. Given appropriate support new and existing businesses could develop to serve the increased visitor market. A potential visitor spend of £500,000 per annum has been identified. In addition part of the costs of restoration would be spent in the local economy.

To progress regeneration in Clydach and restoration of the canal an alliance of local interests is required to campaign and promote these objectives. Key partners in this are the Swansea Canal Society, CRT and the two local authorities. CRT’s involvement is critical in view of their ownership of the canal and the fact the length is split between two local authorities

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## 1. Introduction

This report has been commissioned by the Swansea Canal Society to examine a proposal to restore the Swansea Canal between Clydach and Trebanos. Moss Naylor Young Limited provided a quotation for undertaking this work in September 2011 and was appointed in January 2012 when funding for the study became available.

The Swansea Canal was opened between Swansea and Hen-Neuadd in 1798 following an act of parliament in 1794, Fifteen miles long with 36 locks the canal also included the course of the Trewyddfa Canal in what is now the built-up area of Swansea. The canal contributed to the development of industry in the Tawe Valley and the resultant increase in the urban population. As with many canals where trade was predominantly in one direction from a dead end, the upper reaches gradually fell into disuse following commercial success for much of the 19<sup>th</sup> Century, and by 1904 only the lower six miles were in use, including the southern half of the length considered in this report. The canal closed completely in 1934, although it continued to provide a valuable water supply for industry. In the second half of the 20<sup>th</sup> Century much of the route was lost, especially between Swansea and Clydach, and around Goedre'r Graig. Restoration of the entire canal was considered in the Atkins report of 2002, but this concluded that restoration past Goedre'r Graig to Ystalafera and Hen-Neuadd was all but impractical due to the large scale obliteration of the route under road schemes.

The genesis of this latest project is an apparent opportunity to reclaim the line of the canal through a depot site just to the east of the town of Clydach. This has arisen due to a Sustrans proposal (now completed) to develop a cycleway across the site and questions over the long-term future of the depot. However in discussions with the client it became apparent that a study simply identifying the practicality of reinstating the canal across the site was of limited value, as the length would link two in water but otherwise derelict lengths of canal, and would do nothing to suggest there would be any benefit from or value to the proposals. Thus it was agreed to look at the whole length which is otherwise largely free of obstructions.

This study has used as its core baseline document the Feasibility Report undertaken by WS Atkins in 2002. Patrick Moss, of Moss Naylor Young Limited, was part of that original study team and thus has significant experience of the length of canal in question. In addition, a site visit and additional research has been undertaken to inform this study.

The length of canal being considered is shown in Figure - Plan of length of canal being considered for restoration

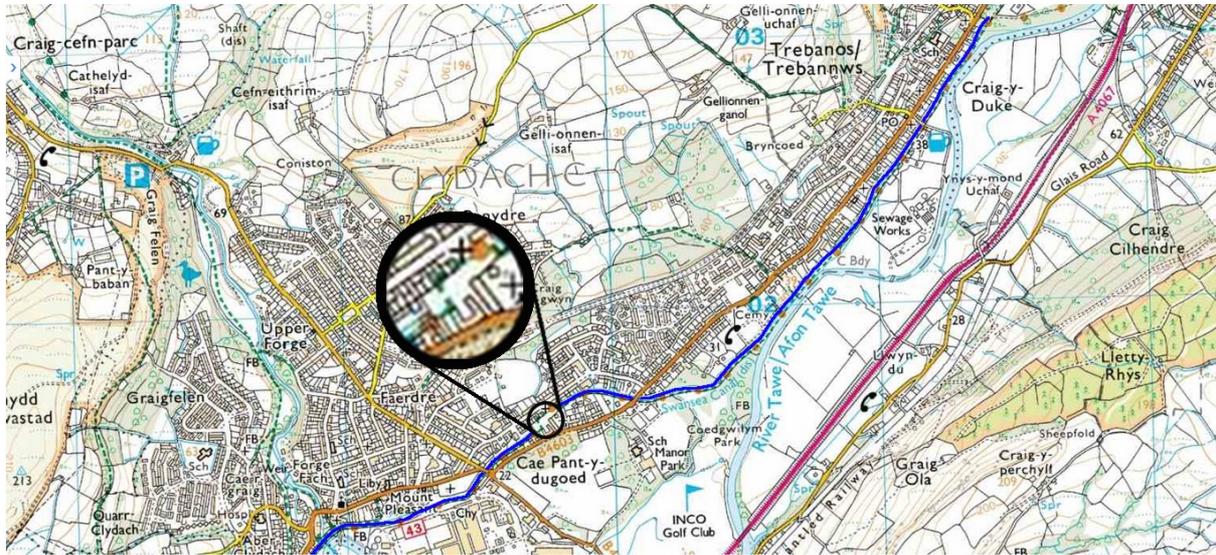


Figure - Plan of length of canal being considered for restoration

The rest of this report covers

- Part 1
  - Planning Policy related to the canal
  - Proposal to reinstate canal at Lock 7
  - Potential to create navigation from Clydach Aqueduct to Trebanos/Pontardawe Playing Fields
- Part 2
  - Summary of works required and costs to reinstate canal at lock 7
  - Summary of works required and costs to create navigation on existing canal sections
- Part 3
  - Potential use and benefits
  - Work needed to develop the proposal and gain funding
- Summary



## Part One

## 2. Planning Policy relevant to the canal

### ***National Policy***

People, Places Futures - Wales Spatial Plan, updated 2008

The Wales Spatial Plan sets the spatial vision for development in Wales and was originally adopted by the National Assembly for Wales in November 2004. The document was updated during 2008 and brings the Wales Spatial Plan into line with One Wales – the Sustainable Development Scheme for Wales.

**The five national themes which guide the Wales Spatial Plan are:** Building Sustainable Communities; Promoting a Sustainable Economy; Valuing our Environment; Achieving Sustainable Accessibility; and Respecting Distinctiveness.

The plan identifies distinct regions within Wales. **The canal is in the Swansea Bay Waterfront and Western Valleys area for which the vision is :** *'A network of interdependent settlements with Swansea at its heart which pull together effectively as a city-region with a modern, competitive, knowledge-based economy designed to deliver a high quality of life, a sustainable environment, a vibrant waterfront and excellent national and international connections.'*

The plan identifies 6 key themes for delivering this vision which include: – developing a strong leisure and activity based tourism industry and ensuring environmental protection and enhancement are fully integrated.

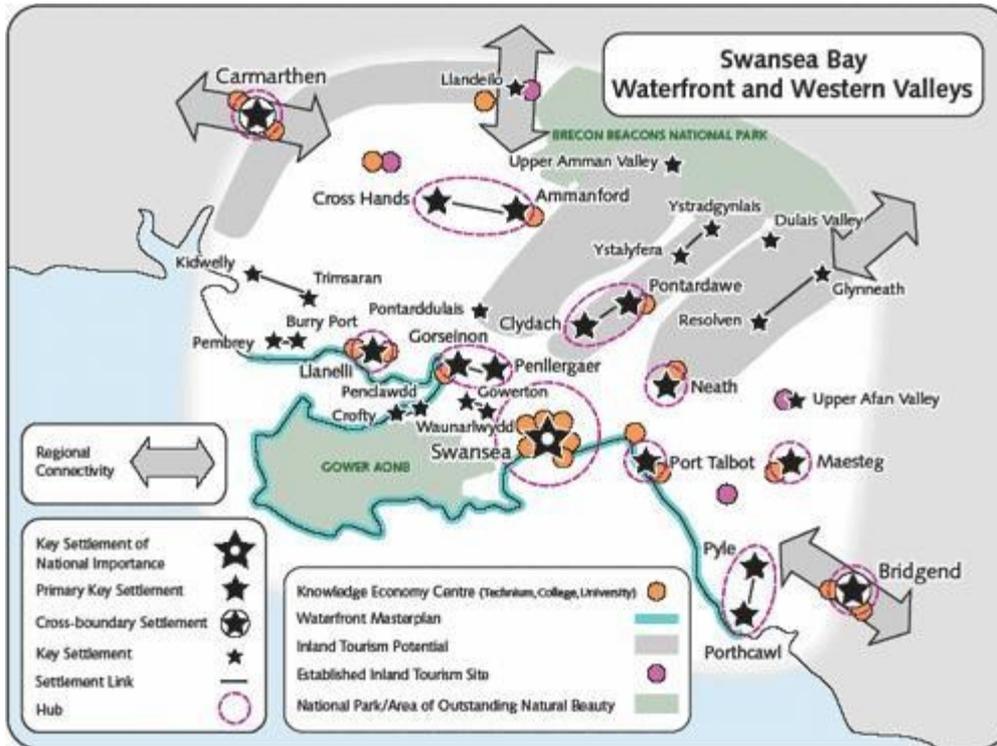


Figure - Swansea Bay Waterfront and Western Valleys area map (Source Wales Spatial Plan, updated 2008)

As seen above Figure - Swansea Bay Waterfront and Western Valleys area map (Source Wales Spatial Plan, updated 2008) identifies the link between the settlements of Clydach and Pontardawe, identifying the overall area as a spatial hub that lies between two national parks and within an area of regional connectivity.

Planning Policy Wales edition 5 November 2012

Planning Policy Wales provides the policy framework for the effective preparation of development plans by local authorities in Wales. As such Plan policies should be written in accordance with the aims and objectives of this document. Additionally it is the guiding document with which to make development decisions when development plans or their specific policies are out of date or under dispute. The document largely focuses upon supporting sustainable development, placing much emphasis on aiming to prevent and address the implications of climate change including flood risk and prevention, and promoting low carbon technologies and alternative energy as a means of boosting the economy. Aims, objectives and guidance within the document that are relevant to this study are identified below.

Chapter 4. Planning for sustainability, notes that the planning system provides for a presumption in favour of sustainable development to ensure that social, economic and environmental issues are balanced and integrated. Consequently, planning policies, decisions and proposals should (in summary): Contribute to the protection and improvement of the natural and built environment, so as to improve biodiversity, recreational opportunities, environmental assets and quality of life; help to ensure the conservation of the historic environment and cultural heritage, acknowledging and

fostering local diversity; and promote access to employment, health, community, leisure and sports facilities and open and green space, maximising opportunities for community development.

Chapter 6 identifies the Welsh Governments objectives with regards to Conserving the Historic Environment identifying Local Planning Authorities as having an important role in securing the conservation of the historic environment while ensuring that it accommodates and remains responsive to present day needs. This key aspect of local authorities' wider sustainable development responsibilities should include measures to preserve or enhance the historic environment as a resource for future generations by recognising its contribution to economic vitality and culture, civic pride and the quality of life.

Chapter 8 (Transport) aims, amongst other things to promote walking and cycling, especially for shorter trips and states that planning authorities should seek to promote the use inland waterways by the protection or provision of access to them but should weight the provision of such facilities against environmental considerations.

Possibly the most important chapter for this study is **Chapter 11 Tourism, Sport and Recreation**. This chapter recognizes that

*“Tourism is vital to economic prosperity and job creation in many parts of Wales. It is a significant and growing source of employment and investment, based on the country’s cultural and environmental diversity. Tourism can be a catalyst for environmental protection, regeneration and improvement in both rural and urban areas”.*

Pp153. Consequently Local Development Plans should encourage sustainable tourism development (including in existing urban and industrial heritage areas) but manage the sector in ways which minimize environmental impact, in order to promote local prosperity, support community well-being and involvement, whilst protecting and giving value to natural heritage and culture.

The chapter recognizes that Sport and recreation contribute to quality of life and as such supports the development of facilities that encourage physical activity and provide opportunities to improve health and wellbeing whilst making urban areas more attractive places to be. Local Authorities are therefore encouraged to promote the national cycle network, long distance foot paths, bridleways, canals and the use of inland waters and disused railways as greenways for sustainable recreation by ensuring adequate land and water resources are allocated for formal and informal sport and recreation. They should provide the framework for well-located, good quality tourism, sport, recreational and leisure facilities that are attractive, well maintained, safe and accessible to all and do not cause detriment to adjoining users, wildlife, ecology or flood defences.

Finally, in line with the objectives of Chapter 13 **Minimising and Managing Environmental Risks and Pollution** any proposals for reinstating / regenerating the Swansea Canal should maximize environmental protection, prevent / manage pollution and minimise the risk of flooding.

To summarise, proposals for the restoration of the Swansea Canal between Clydach and Trebanos are generally in line with the aims and objectives of national planning policy. However, in order to

maximise the potential for restoration, proposals should seek to identify opportunities for economic development of tourism facilities, provide a wide range of safe, accessible and well maintained leisure, tourism and recreation opportunities that are conducive to improving health and wellbeing and should minimise the risk of pollution and flooding whilst maximizing the cultural heritage offer.

In addition, minimising flood risk and promotion of the low carbon economy also feature highly in the document. In accordance with this it may be worth exploring options for energy generating energy through renewable sources such as installing water-powered turbines on reinstated locks and fitting solar panels to any new tourism facility.

### **Local Planning Policy**

The length of canal which is proposed for restoration and the purpose of this study lies partly in the Swansea County Borough (approximately 2/3<sup>rd</sup> of the canal) and partly in the County Borough of Neath Port Talbot (approximately 1/3<sup>rd</sup>). Consequently the policies of both Councils development plans must be considered.

Swansea Unitary Development Plan, 2008

The purpose of the Swansea UDP is to *“promote sustainable development, protect the environment, facilitate regeneration and support community planning by ensuring sufficient land is available for all development needs (including housing, industry, etc.), and that allocations are well located in terms of environmental, social and economic aspirations.”*

The plan’s Spatial Strategy primary focuses on reinvigoration of the City Centre and Waterfront, seeking to restrict the outward spread of the urban periphery and to protect and enhance urban greenspace and the surrounding rural environment. Significant focus is placed upon the Swansea Bay Area and continuing the major development of SA1. Policy EC2 specifically addresses promoting mixed use development here, including making appropriate provision for a network of pedestrian and cycle routes, and safeguarding the potential canal route corridor.

Part One of the plan identifies a number of strategic policies that will be used to deliver the vision, aims and objectives of the plan. Those applicable to this study can be summarised as:

Policy SP2 CREATING A QUALITY ENVIRONMENT – which protects the countryside, with green wedges shaping the urban form and safeguarding the distinctive interplay of town and country;

Policy SP4 DEVELOPING THE ECONOMY – which supports proposals to develop or improve the variety and quality of tourism facilities where they contribute to the growth of the local economy, and where they do not have a significant impact on natural heritage and the historic environment or the amenity of local communities;

Policy SP8 PROVIDING HOMES AND COMMUNITY FACILITIES – which aims to improve the range of sports and leisure facilities and the tourism portfolio by establishing a network of urban destinations,

enhancing sustainable countryside recreation opportunities and further developing a hierarchy of sports facilities; and

Policy SP9 PROVIDING HOMES AND COMMUNITY FACILITIES – which favours improved and more accessible community, education and health facilities to meet the needs of new development schemes and to overcome existing deficiencies.

With regards to site-specific allocations, as identified on the proposals map, the following policies are worthy of note:

The entire stretch of canal is allocated under Policy HC31 WATER BASED RECREATION. This policy supports opportunities for the development of water based recreation facilities that are compatible with environmental and nature conservation interests, water supply, commercial shipping and flood defence. The policy protects a line for linkage of the Swansea Canal with the navigable section of the River Tawe, stating that development that would prejudice the restoration of the canals or damage their fabric or infrastructure will not be permitted.

Text accompanying the policy notes the role of the inland waterway system in providing a range of recreational opportunities, particularly for informal activities such as boating and canoeing and refers to the findings of the (Atkins) feasibility study which highlights the potential of the local canal system, if reopened, to create a 32 mile integrated waterway system centred on Swansea Docks, which could serve a national tourism market. Additionally, earlier in this chapter it is noted that: *“New and enhanced facilities are needed to cater for demand for sports and leisure pursuits arising from increasing leisure time and prosperity. This will also be of benefit to an enhanced tourism portfolio. Accordingly it is proposed to... ..Utilise opportunities for establishing a wide ranging water-based recreation portfolio, encompassing the County’s rivers, lakes, canals and the coastal area”pp.83.*

Virtually all of the length of canal (from the works site upwards) is allocated for creation or improvement of public access routes, under Policy AS4, which encourages the creation of public access routes, including the Public Right Of Way (PROW) network, by; maintaining a network that avoids conflict between users; protecting existing and proposed routes from development that would prejudice their provision in the future; and ensuring new development is linked to a public access route or the PROW network wherever possible. Text accompanying the policy notes the importance of paths in enabling enjoyment of the countryside and recognises the potential of disused canal towpaths to create walking, cycling and horse riding routes, supporting proposals for their extension and development.

Allocations that traverse or are located near to the canal, which are relevant to this study include:

Policy HC23 COMMUNITY RECREATION LAND, which resists development that will lead to loss of land for community recreation purposes unless (amongst other things) the existing and potential recreational or amenity or natural heritage or historic environment value of the land is maintained.

Policy EV21 RURAL DEVELOPMENT which states that non-residential development in the countryside will only be permitted where it is beneficial to the rural economy or meets an overriding social or economic need of the local community or is appropriate development associated with farm diversification, sustainable tourism and recreation, or nature

The nearby river Tawe is identified as a green wedge under Policy EV23 and also allocated under EV24 Green Space System. EV24 states wildlife reservoirs; green corridors, pocket sites and riparian corridors, the natural heritage and historic environment will be conserved and enhanced. As such development proposals which would have a significant adverse effect on the greenspace system or which do not provide for appropriate compensatory or mitigation measures will not be permitted.

Adjoining or near the canal corridor are areas of land allocated for either small housing developments (approximately 11-14 dwellings) under HC1, Economic Use under EC1 (next to the start of the study area in Clydach) or for development of shopping facilities under policy EC5 (north of the canal between the junction with the river Tawe and Mond Lock). Proposals for reinstatement of the canal would complement all of these policies by improving the quality of the local environment and adding amenity value to the local area.

To the south of the canal east of Mond Lock there are two small sites identified as HAZARDOUS INSTALLATIONS / CONSULTATION ZONES under Policy EV41, which notes that development of land in the vicinity of existing hazardous installations will not be permitted if there would be significant risk to life or health. The nature and extent of these hazards would need to be investigated further when finalising plans for reinstating the canal.

Finally, all proposals need regard for flood risk, surface water runoff, pollution prevention and control and protection and enhancement of biodiversity, wildlife, landscape and cultural heritage.

#### Neath Port Talbot Unitary Development Plan 2008

The Neath Port Talbot Unitary Development Plan was adopted in 2008 and is now the chief document used to guide development, conservation and the use of land within the County Borough. Like the Swansea UDP it consists of two sections supported by a proposals map.

In addition to working towards Sustainable Development, which is a central theme at the core of the UDP, the document aims to deliver the vision for the area, as set out in the Community Plan, including: to be healthier, more prosperous, attractive and welcoming; to offer a better quality of life, and to offer wider range of facilities, services and jobs.

In order to achieve these aims the plan will provide for (amongst other things) health, education and leisure whilst protecting and enhancing the landscape, countryside, habitats, wildlife and built and natural heritage which are important to quality of life in the borough.

Of Objectives identified in Part One of the Plan the following are relevant to this study:

Encourage tourism and improvement of tourist facilities to maximise the economic and employment benefits whilst safeguarding the environment and interests of local communities.

Promote a sustainable pattern of provision which would enhance the facilities and opportunities available to residents and visitors, provided they would not cause unacceptable impacts;

Ensure that new development makes its fair contribution to the provision of necessary facilities and services, either within the site or as a contribution to provision to serve the area.

Part One of the UDP contains the plan's Strategic Policies for development and other use of land in the County Borough. Those which are deemed to be of relevance to this study are (in summary):

Policy 1 – which aims to protect and enhance the countryside, seascapes and landscapes;

Policy 2 – which aims to protect and enhance wildlife and habitats;

Policy 5 – which aims to protect and enhance the Bountly borough's built environment;

Policy 6 – which states that the County Borough's historic environment will be protected and those proposals that would aid its preservation and enhancement supported;

Policy 9 – which encourages proposals that would diversify and strengthen the local economy; and

Policy 17 – which states that provision for sport, recreation and open space will be promoted and enhanced.

Text supporting the later policy notes the role of recreational facilities in meeting wider sustainability objectives including enhancing biodiversity, improving local air quality, promoting social inclusion and the growth of a diverse economy.

With regards to site specific policies identified on the proposals map, the entire length of the canal within Neath CBC is allocated and safeguarded for potential restoration under policy under POLICY RO6 – CANALS. Part A of the Policy states that Proposals which would prejudice the conservation, restoration and operation of the Swansea, Neath and Tennant Canals will not be permitted. This includes development which would adversely affect the setting of the canals or discourage the use of the canals for recreation and water supply. Part B of the policy protects a route to enable the restoration of the Swansea Canal between Trebanos and Herbert Street, Pontardawe.

Text accompanying the policy notes that:

“The Swansea Canal is owned by British Waterways, but although maintained, there is no right of navigation. A lengthy section of the canal within Neath Port Talbot has been infilled between Trebanos and Herbert Street, Pontardawe. A route is safeguarded by the policy to allow restoration, but this would be particularly expensive involving a new line of canal with locks, a tunnel under the

A474 and the provision of new bridges. The canal is available for navigation between Holly Street, Pontardawe and Ynysmeudwy and between Clydach and Trebanos... ...As a consequence of the commercial disuse of the canals since the 1930's, other than for water supply, lengthy sections are of interest as habitats for nature conservation... ...restoration work should take into account the opportunity to retain habitats and the need to recognise the status of protected species such as water vole and otters."pp173.

Other chapters of the plan recognise the importance of canals for their role in adding to the character of the area, and as tourism and recreation resource that add to quality of life and offer the potential to create tourism related employment opportunities in the area.

More specifically it is noted that the Neath, Tennant and Swansea Canals provide important local recreational resources within sections of the canals used for boating and draw visitors from a wide area. Whilst the Neath, Tennant and Swansea Canals are currently only available for navigation in part, they form part of a potential network of canals which offer great tourism and leisure opportunities that have the potential to become a major tourism attraction. The creation of an integrated network of canals and waterways linking the Neath, Tennant and Swansea Canals via the Swansea Marina, and through the lower Swansea Valley has long been recognised. Feasibility studies have confirmed that although providing the "missing links" within the City and on-going to restore the canal system in the Neath valley, including improvements to towpaths to improve walking and cycling facilities. As such the potential to restore the existing canal network and recreate a new integrated system will be safeguarded.

Policy ENV1 DEVELOPMENT IN THE COUNTRYSIDE protects the countryside and landscapes from proposals that would have an unacceptable impact on their character and appearance, wildlife or habitats;

Policy RO2 NEW SPORT AND RECREATIONAL FACILITIES, which promotes provision of sport and recreational facilities, especially where they are , located near to town centres and cause no detriment to nature;

Policy RO4 NEW SPORT AND RECREATIONAL FACILITIES, which supports proposals that improve and extend access to the countryside and coast including cycleway, pedestrian and bridleway networks.

Policy RO5 WATER BASED RECREATION, which safeguards and encourages water based recreation activities and essential ancillary facilities where proposals would not jeopardise local amenities, flood defences, the local landscape or create pollution.

The *Planning and Compulsory Purchase Act 2004* introduced a statutory requirement for each Local Planning Authority in Wales to produce a Local Development Plan (LDP) which replaces the previous system of Unitary Development Plans.

As with all Local Authorities in Wales, both Swansea CBC and NPT CBC are in the process of preparing LDP's to replace existing UDP documents. Whilst Swansea has not yet produced a document for consultation, NPT CBC Local Development Plan (LDP) Pre-Deposit LDP (September 2011) underwent

public consultation in autumn 2011. Once the emerging LDP is adopted in 2014, it will set out the future shape of Neath Port Talbot up until the year 2026. With regards to the objectives of this study, it is therefore only diligent to take into account the proposals and policies of the emerging LDP deemed relevant to this study.

Neath Port Talbot pre-deposit local development plan September 2011

The pre-deposit document highlights the characteristics of the County Borough along with issues the area faces and aims that accord with national sustainable planning objectives.

With regards to canals and the aims of this study, Section 3 of the plan (Key Characteristics and Issues of Neath Port Talbot), notes that: the County Borough's canals are an important heritage feature and tourism asset. *"The Canal network is an important part of the County Borough's historic heritage. It forms part of a network of green corridors which encourages walking and cycling and attracts visitors to the area."* (pp. 20). Yet despite this the County Borough has the worst health in Wales and a shortfall of community and recreation facilities. Regeneration of the Swansea canal could provide opportunities to address this shortfall and encourage leisure activities that are conducive to improving health and wellbeing.

Following on from this the plan identifies the five key objectives of: Building Healthy, Sustainable Communities; Promoting a Sustainable Economy; Valuing our Environment; Achieving Sustainable Accessibility; and Respecting Distinctiveness. Each of these objectives is then addressed various options for growth are explored.

Section 8 of the plan addresses Promoting Sustainable Employment and notes that many of the future job opportunities will be provided from the tourism and leisure industries. The tourism and leisure potential offered by the County Borough will be supported and enhanced, which will include the following; *"The canal system will be promoted as a local and visitor resource. This will work towards providing an integrated Swansea Bay Waterway Network comprising the Neath, Tenant and Swansea Canals... ..The Swansea Canal restoration will end at Ynysmeudwy and restoration will be focused between Trebanos and Ynysmeudwy. Beyond this the line of the navigable canal will not be protected or restored."* Pp. 88

With regards to specific policies applicable to this study:

Policy 12, Open Space, Leisure and Recreational Facilities states that the LDP will seek to ensure the provision of sufficient open space, leisure and recreational facilities; prioritising, retaining and wherever possible enhancing existing open space and recreational facilities within existing urban areas, in order to improve walking and cycling routes.

Policy 31 The Canal Network is possibly the most important part of the plan, it states that *"The line of the Neath, Swansea and Tenant Canals will be protected except for the section of the Neath Canal above Ysgwrfa Bridge Glynneath and the Swansea Canal above Ynysmeudwy"* pp.123.

Text accompanying policy 31 notes that: Neath Port Talbot contains canals which form part of the proposed Swansea Bay network of waterways and are important recreational routes for residents and visitors. Significant lengths of the canals have been restored to a navigable standard but major work remains in linking the canals and restoring the lengths that are unnavigable. However, it is proposed that the two short lengths of former canals above Ynysmeudwy and in Glynneath are not protected as their restoration would be particularly expensive, difficult and compromise existing roads and residential properties.

The outcomes of the public consultation on the Pre-Deposit plan will be taken into account in the Deposit LDP which will undergo public consultation in 2013. It would be in the interests of the SCS to keep up with the development of the emerging NPT LDP document as it would of the Swansea LDP.

Finally, it is worth noting that in addition to the Statutory Adopted UDP documents and the emerging LDP's for Swansea and Neath Port Talbot, both authorities produce Supplementary Planning Guidance (SPG) to provide more detailed advice on particular planning topics or locations. Whilst neither authority has SPG referring to canals or inland waterways, it may be useful to look at other topic based documents (such as guidance on landscape and /or open space) once proposals for reinstatement of the canal are more advanced.

### ***Summary of findings***

The central aim of all planning policy covering the area of this study is to promote and implement sustainable development. By fostering appropriate economic growth, and providing an accessible range of community infrastructure, it is hoped that future development will improve overall quality of life in the area without causing detriment to wildlife, biodiversity or natural, built or cultural heritage.

With regards to the specific proposals in this study, it can be concluded that both national and local planning policy are in support of restoration of the Swansea Canal between Clydach and Trebanos. Both the Neath Port Talbot UDP and Swansea UDP's offer protection to this line of the canal to allow future restoration and note the opportunity to create a major tourist attraction by reinstating and linking the network of canals and rivers in the area. Despite this, any specific proposals to reinstate the canal need to protect the areas wildlife, biodiversity and landscape assets and ensure there is no increased risk of flooding or pollution. It would be diligent of SCS to keep up to date with preparation of the emerging Local Development Plans and take part in consultation where opportunities are available.

### **3 Proposal to Reinstate the Canal at Lock 7**

The Swansea canal disappears for distance of approximately 130 metres through a council depot on the Pontardawe Road just east of Clydach. The length of canal that is buried includes one lock, for the purposes of this report this is referred to as lock 7 or depot lock.

In the 2002 Atkins Report this length of canal was a short length in a longer section summarised as "Swansea Canal: Section D" which included the canal from the Clydach Aqueduct to north of Herbert Street in Pontardawe.

The area of the depot and the canal line passing through it are illustrated in Plan 1. The canal line is rather but not totally to the north-western side of the site with the bulk of the site between the canal and the Pontardawe Road. The former canal bank was between eleven and twenty nine metres from the rear of the property towards Capel Road, the width of the canal corridor is included in these dimensions, thus at the north eastern end of the site the depot site little wider than the canal corridor itself.

The Atkins report notes that the lock is probably capped on the basis of being able to hear the noise of falling water but could not confirm this.

We have been able to speak to the engineer responsible for the works to fill in this length of canal, John Evans. (In the interests of fairness, the point should be made that Mr Evans was responsible for the work not the decision.) This has revealed significantly more detail. The work was undertaken in 1972 and according to Mr Evans the canal either side of the lock had a five foot (1.5 metre) Armco culvert laid in it that was then flattened to allow a level surface on top: the circumference of the culvert would have been constant but the culvert would be wider and less high once this was undertaken. A weir was inserted at the upstream end for water to enter the culvert and a second one in the lock itself for water to fall to the lower level. An Armco culvert was then installed to take water away from the lock, which itself has simply been capped and has a retaining structure for fill over the culvert at the lower end. The lock was repointed before being capped.



**Image 1: Depot over canal line at Clydach**

When originally covered, the canal line was not built on at all, but subsequently one depot building has encroached onto the cap over the lock. This has required extra support for this part of the building. Overall, the lock and the line of the canal are unsuitable for development beyond car parking and service roads, and in any event the site above the lock is little wider than the original canal corridor. Even downstream of the lock where there is greater depth over the culvert load bearing tests would be required before any structure could be built and some form of reinforcement would probably be required.

There is a suggestion that the boundary wall at the rear of the site is built in part on the bywash to the lock: certainly the locks at Mond and Trebanos have bywashes and there is no trace of one here. However, reinstating the original bywash is not essential as either a replacement can be built or the lock gates designed to allow water to weir through the lock. The bywashes at the other locks are currently redundant as water cascades through the chambers.

The desired proposal is to excavate the canal on its original line, indeed at the north eastern end there is virtually no alternative, at the south western end this would leave a small wedge of land between the canal and the site boundary

Re-excavation of the canal and the lock would result in a continuous waterway linking the canal either side of the site. This would have an adjacent towpath and the new Sustrans Cycle Route would follow this.

#### 4 Navigation from Clydach to Trebanos/Pontardawe Playing fields

The depot separates two in water lengths of the Swansea canal, and those following the canal on foot are forced around a rather unattractive and often muddy footpath behind high fences that defies most of the current good practice on urban footpaths, for example it is not possible to see through the path from end to end nor are there are alternative routes other than turning round in the event that problems are encountered part way along. Natural supervision is also distinctly lacking. Whist the benefits of restoration are not discussed in this section of the report realigning this path to the canal line would be advantageous in its own right.

##### *Clydach to Depot*

The in water canal starts in Clydach: south of here to Swansea Docks the canal has largely been obliterated. The present end (or start) in Clydach has arisen by default with development claiming the line to this point and no further.

100m north-east the canal crosses the Clydach Aqueduct. This single arch structure is typical of the design for the Swansea Canal with inbuilt overflow weirs emptying canal water off the structure and into the Afon Clydach below. There are also significant industrial remains here from the canal's heyday, and interpretation panels referring to these and the canal. Overall this is a pleasant spot in an urban area, and with the adjacent footbridge over the Afon Tawe provides something of a focus for local recreation.



**Image 4: Clydach Aqueduct**

Heading north, the canal is unnavigable and increasingly silted and fast flowing. Increasing urban in character Mond Works is reached, and the canal is flanked by high walls on each side. 750m from the start in Clydach lock 6, often known as Mond Lock, is reached (locks 1-5 have been lost to development). Of necessity the towpath goes over the road at this location. Mond Lock survives

untouched other than for 80 years of neglect, and is in remarkably good condition for a lock unused for so long. The towpath side presents few problems, but the north-west side has been graded, which would need to be reversed if any lock operations are to take place from this side in future.

The Lock appears to be fairly typical of Swansea Canal locks, from what details can be seen of the few that survive: double bottom gates with gate paddles, a single top gate and ground paddles at the top. It is not the role of this report to dwell too closely on the finer details of the canal's heritage, but there appears to have been some unusual pulley gear alongside the bottom gates on the towpath sides. The off-side is sufficiently degraded that it cannot be deduced whether such gear ever existed on that side. This may have been related to the bridge being too close to the lock to allow balance beams, or may have had some other function; the absence of any such gear at the other surviving locks (none of which have a bridge so close) does not assist in interpretation.



**Image 3: Mond Lock Gear**

A further 250m of canal take the route to the south-west side of the depot. This short length is urban in character with old works to the towpath side but trees screening development on the off-side. Just above Mond Lock a take-off feeds water the Mond.



**Image 4: the depot from Downstream**

The principle items on this length are the silting, which renders the canal virtually unusable by even canoes, and the derelict state of Mond Lock, which needs to be refurbished to prevent it crumbling further and, if desired, restored to use. Recent tests have demonstrated that the silt in the canal above Mond Lock is relatively uncontaminated, whereas that below the lock has a number of contaminants and would need treating and specialist disposal if removed.

#### *Depot to Trebanos*

From the depot to Trebanos the canal runs level, initially past housing and some employment premises, then under the main road and through Coed Gwilym Park where a previous restoration scheme has left the canal much clearer than elsewhere. This length starts through more formal recreation grounds with managed grass areas and formal footpaths, and the centre of the park itself where car parking and some leisure facilities are provided. The Swansea Canal Society and the Swansea Valley History Society maintain an exhibition on the local industrial heritage including the canal here. Heading north east along the valley, the parkland continues between the canal and the river whilst housing backs onto the non-towpath side. With this the canal line begins to become encroached by silt build up and occasionally by occupation at the foot of gardens, by the time the locks at Trebanos are reached, the channel is again silted, although wider with a slower flow unlike elsewhere.



**Image 5: the canal through Coed Gwilym Park**

The length of canal described here is already an attractive walk, especially heading up the valley from Coed Gwilym Park, and is canoeable for a distance around the park itself, although anecdotal evidence suggests there has been no use of the waterspace at all for several years. Dredging would allow a range of small boats to use the whole of the pound although for two reasons the length up the valley from the park will remain more attractive. First, it is, for most people, more aesthetically pleasing, the second, for both the walker and the boater, whether or not the locks at Trebanos operate or not, they are a pleasant landmark and hold the promise of more beyond. The other end, terminating at a council depot wall, does not offer such a prospect.



**Image 6: Upstream end of depot**

One point that should be noted is that there is only one winding hole (turning point) on this length of canal, and it is the only winding hole on the entire length from Clydach to the playing fields. One winding hole isn't a lot of use, as whilst a boat can turn having departed it must then reverse to turn again. As things stand, boats longer than about twenty feet cannot turn round anywhere else

### *Trebanos to Pontardawe Playing Fields*

The two locks at Trebanos extend the canal another 120 metres to the level that leads to the playing fields. The locks are cascaded and at their tails have had some masonry removed which combined with the setting and the possibly misleading water levels due to silting give the impression of them having a somewhat lower lift than the lock at Clydach, however a cursory measurement with a tape measure suggests all three have a lift of between 9 and 10 feet (2.7 -3 metres). The cascading, whilst reducing their archaeological appeal, does give them a pleasing appearance for those simply out to enjoy the surroundings.



**Image 7: Trebanos Locks**

Above the locks the canal continues for around 450m to end at a culvert on the edge of the playing fields. In this length, the canal is badly silted and at times the available channel for water flow is narrowed considerably. Some properties have take advantage of this and appear to have encroached on the line of the canal. From the culvert, a footpath follows the approximate line of the canal towards Pontardawe. At the culvert the piling on the offside is in need of some attention due to tree growth behind although this is more likely to affect water supply than navigation if this is the terminus.



**Image 8: The end of the canal between Trebanos and Pontardawe**

### *Summary and Conclusion*

The lengths of canal separated by the depot different in character but are essentially still existent and vary in their visual impression from acceptable (although perhaps only just acceptable immediately north east of the depot) to very attractive, indeed the stranger to the area would be please to visit both the canal at Clydach and the length from Coed Gwilym Park to the locks at Trebanos

In terms of restoration, either to navigation including the locks or for local use between the locks, the two lengths of canal are relatively straightforward, although a full survey of bank stability should be carried out before detailed engineering proposals are developed. The entire length is in dire need of dredging, and remedial maintenance to the banks will be required as part of this process. It has been noted that where drainage sluices exist from the canal the channel leading to them has been dredged.

If navigation is intended, it will be necessary to determine whether the channel can be achieved above Trebanos locks without claiming small pieces of land presently being used as the gardens to houses backing onto the canal.

Two highway structures cross the canal in these lengths, at Clydach and Coed Gwilym: neither has any reinforcement that would impede navigation and restoration proposals would not affect these structures.

Boats do not place a strain on aqueducts or culverts as such but impact may on occasion occur. Given the water retaining nature of these it is assumed they are inspected regularly, however an inspection prior to dredging would be recommended.

The only significant works other than dredging would be for the three locks. Clydach Lock may be in need of attention if it is not to deteriorate further and create problems in future. Trebanos Locks do not, at present, need anything more than inspection and maintenance to retain the status quo, but would require significant work to remove the cascading and partially rebuild the walls for navigation.



**Image 9: Encroachment near Trebanos**

## Part Two

## 5 Works Required to Reinstate Lock 7

To reinstate the canal through lock seven and across the depot site the following works are required:

- Excavate and refurbish the approach canal below lock seven: note this will result in a cutting up to three metres deep above water level, as the canal track across the sight has been infilled and levelled to the same height as the canal above the lock. A more detailed study will be required to determine exactly what form this should take
- Uncover lock chamber, refurbish lock, equip with furniture
- Excavate and refurbish approach canal above lock seven
- Reinstate towpath

The main temporary works will be the installation of suitable pipes to carry the water past the lock whilst the main works progress

No	Works	Cost
1	Remove fill below lock, estimated at 65 metres in length; 1500 cubic metres of inert fill @£20 per m3  Disposal @£10 m3	£30,000   £15,000
2	Creation of 65 metres long approach channel @£300 per linear metre	£21,500
3	Refurbish Lock chamber including furniture	£650,000
4	Remove Fill above lock, estimated at 50 metres length and 500 cubic metres of fill @ £20 per m3  Disposal @ £10 per m3	£10,000   £5,000
5	Creation of 50m long approach channel @£300 per linear metre	£15,000
6	Towpath surfacing 130 metres @£10 metre	£1,300
	Total	£737,800

No	Works	Cost
	Prelims@ 25%	£184,450
	Design Fees @10%	£73,780
	Professional Fees @12%	£88,536
	Contingency @10%	£73,780
	TOTAL	£1,158,346

Notes:

Item 1 assumes a cutting with 45 degree sides, to reduce land take the canal corridor at the base is restricted to three metres. This is a working assumption for cost purposes and NOT a recommended design

Item 3 is taken from actual costs incurred on recent HLF funded schemes

Plan 1 shows the alignment of the canal through the depot



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## 6 Works Required to Create Navigation on Existing Canal Sections

No	Works	Cost
1	Dredging of Channel: assume 5m <sup>2</sup> cross section along 4km of canal @£20 per m <sup>3</sup> (20,000 m <sup>3</sup> )	£400,000
	Assume disposal of 75% at uncontaminated rate @ £10 m <sup>3</sup>	£150,000
	Assume disposal of 25% at contaminated rate @£200 m <sup>3</sup>	£1,000,000
2	Repair towpath walls, say	£10,000
3	Refurbish Mond Lock	£500,000
4	Rebuild and Refurbish Trebanos Locks	£1,200,000 (two locks)
5	Towpath surfacing 4km @£10 per linear metre	£40,000
	Total	£3,300,000
	Prelims @ 25%	£825,000
	Design Factor 10%	£330,000
	Professional Fees 12 %	£396,000
	Contingency 10%	£330,000
	TOTAL	£5,171,000

## Part Three

## 7. Potential Use and Benefits

### *Regeneration and development*

There are two particular areas to consider in regeneration: the depot itself and the other industrial buildings near the canal around Clydach.

The opening at the depot is fairly obvious, and ideally this site should be the subject of a comprehensive redevelopment proposal that includes the canal. The depot in its current state is very low value use, and also clearly reaching the end of its operational life. The attractiveness of the site would be increased by the proposed development effectively in the back land of the plot, and would provide an alternative focus to the main road the site fronts on to.

Immediately below the depot, on the towpath side, are some industrial buildings that are clearly nearing the end of their working life, and indeed are not used for industry at present beyond a hand car wash. Again this site has the benefit of a canal frontage (already existent in this case) and road access. The presence of Mond Works, other industrial sites and vacant land in the area above and below Mond Lock makes this an obvious area to seek a redevelopment scheme (possibly linked to the depot site) that can play a part in extending the town centre of Clydach to this area and creating a waterside area for the town. This concept can be taken further if the canal corridor to the aqueduct is included thus bringing the open area around the canal and the river into the proposals.



**Image 10: Canalside buildings above Mond Lock: Part of a future “canal quarter”?**

It should be noted that this report does not advocate any given form of development at these sites, especially as the buildings between the Mond Works and the depot clearly have some historical interest, but is identifying opportunities for further development related to the canal.

In order to get the perspective of a private developer Moss Naylor Young Limited approached Lanndia, a company that we have worked in partnership with elsewhere, for some initial advice. This can be summarised as follows

*The presence of the canal, and the possibility of reinstatement, of the canal through the depot site, offers the opportunity to lift the surrounding area for the purposes of economic and social regeneration. Such a scheme is not without difficulties, and will need some level of subsidy to become established, but without such a scheme the area surrounding the canal will remain at its present level, with the commensurate risk the relative decline, as other places nearby achieve growth or are regenerated, becomes absolute decline.*

*-Positives:*

*- The depot is possibly at end of its life so we could assume the plot with a possible water frontage could become available. Note that with the canal easement running through the centre of the site it is difficult to imagine the site as is (without a re-opened canal) being used for anything other than its current use.*

*- However with water frontage this will be an attractive site (in aesthetic sense of the word), the trick is to explore how grant funding and joined up thinking locally can make the site attractive in a financial sense.*

*- therefore the site represents a regeneration opportunity possibly along the lines of waterways heritage and tourism as outlined elsewhere in Moss Naylor Young's report.*

*- We would suggest that for the two councils involved a do nothing approach is not really an attractive option even if financially they cannot afford to fund regeneration.*

*- Welsh Government support for a well-argued regeneration case would be critical for any scheme to succeed.*

*Canal and River Trust, if they take a commercial outlook would be a useful supporter, although it looks as if they own the canal but not the land adjacent to. It is necessary to seek benefits for the trust as well*

*We can see that a waterfront development with the right mix of uses would be attractive to the two councils concerned and may help increase tourist numbers and boating use putting Clydach on the " to visit map of wales", the key to this is what land base uses would significantly add value to the site.*

*Negatives:*

*Housing market: locally market prices are really low, typically approximate maximum £100,000 for a 3 bedroom house and approximate maximum for a 5 bed £300,000. There are two plots for 3 bed houses for sale at £70,000/ £80,000 per plot. However they are single plots and aimed at the self-build market. Given that if there was a buyer who needed a 3 bed house in the locality they could buy an existing one for the same money it doesn't appear these plot prices are realistic. Initial conclusion the depot land has next to no value and if contaminated probably a negative value.*

*Retail: Clydach being rural with a comparatively low residential population surrounding, plus being around 4 miles away from the motorway and a tad further away from Swansea think that retail proposition could well struggle to make any values that would bring the site forward. Retail is likely to be at a local level with resultant lower values.*

*Canal costs: £6.3 million is a lot of money in comparison to notes on values above making an enabling development scenario a big ask on current information. (MNY note, the development need not be expected to fund the whole cost of restoration)*

#### *Initial Thoughts*

*Need to create a coalition of land owners and stakeholders prepared to support and engage with reopening of canal and regeneration of adjacent land.*

*To move this further on we would suggest that a need to commission a development issues and options report for the land adjacent, to enable a decision to be made to progress a funding application or not.*

*The project as a whole seems to have a heritage hook however there is a need to combine this with an added value land based use to make this site work as a development. Opening discussions with local interest groups and local councils via consultation could provide further critical information,*

#### *Potential Use and Benefits*

At present the canal is used exclusively by walkers and occasional cyclists. The canal is canoeable at Coed Gwilym Park but no use seems to be made of this. In practice, unless a local initiative is made to provide canoes and canoe training in a still-water environment, this is not surprising: the length of canal available is limited and it is not clear how a visiting canoeist might gain legitimate access even if they wanted to.

If the navigation is extended to 4km and 4 locks, that is, the maximum available without a very high level of spend on civil engineering, clearly the end result will be a significant improvement on the present situation. In qualitative terms the improvements would be

A navigable waterway 4km long with 4 locks linking Clydach, Coed Gwilym and the outskirts of Pontardawe,

A much more attractive canalside environment, especially at the depot and either side of it,

Opportunities for regeneration led by a waterside location at and around the depot site

Taking the benefits of each improvement in turn

## *Navigation*

As a realistic starting point, a 4km long navigation is not going to be as busy as, say, the Cheshire Ring on the main canal system. An experience crew could navigate from Clydach to Pontardawe Playing Fields in about two hours, making four hours for the return trip. This is not to say that no use would be made however.

The length provided would become an attractive option for a trip boat operation: Coed Gwilym is about half way, giving the opportunity for trips in both directions and a four hour round trip on occasion for enthusiasts. Initially this would need to be run by or on behalf of the canal society or another interested body.



**Image 11: A trip boat on the Oxford Canal at Banbury: photographed during the folk festival with musicians on board**

The length is also suitable for the hire of small day boats, whether a market for this exists would need to be tested. In practice such boats are generally hired in conjunction with other lines of business such as canoe hire and bike hire, to build up sufficient turnover for the operation.



**Image 12: A small day hire boat on the Somerset Coal Canal near the Kennet and Avon**

At present only a limited length of the canal is canoeable. This in itself restricts the attraction of using the canal for canoeing, especially to anyone hiring canoes out. A beginner could probably take much of the day over a 4km length, and whilst canoes passing through locks isn't common (not least because on the main system licences for unpowered vessels do not generally include lock use) it is possible. In addition portage could be made easy, and the length between Depot Lock and Trebanos is long enough for many if properly dredged.

During the site visit it was noted that many of the properties backing onto the canal had made some effort to have a canalside landing, in some cases this was simply a patio but in others there does appear to have been an aspiration to moor a small boat, possibly a rowing boat or similar.

Finally, and possibly most importantly, the length would provide opportunities to host trail boat festivals, perhaps including the national trailboat festival, which would draw visitors to the area and promote both the canal and the Swansea Valley.

#### *Bankside users*

The first advantage of the scheme is the removal of the depot which creates a significant barrier. The barrier exists because someone exploring "on spec" cannot see the canal the far side of the depot, and because the path round is distinctly unattractive. Indeed the existing path is in breach of most guidelines for an urban footpath as there are long lengths when a walker (especially one of shorter stature" cannot be seen by any natural surveillance, and a series of right angle bends mean that a pedestrian passing through has no idea what they will find round the corner. Thankfully, anti-social behaviour in this section appears to be rare, although graffiti is present.



**Image 13: The footpath linking the two lengths of canal at the depot**

Once in place the walk could be marketed as Clydach to Pontardawe via Coed Gwilym Park. The last length into Pontardawe is not canalside but alongside the playing fields it is pleasant and emerges, via a subway, on the next length of canal in the centre of Pontardawe.

As the initiative that led to this report is a proposed Sustrans scheme it also seems reasonable to assume that cyclists will make use of a new route.

The above could take place simply by reopening the canal corridor, but an active canal will prove more of an attraction. In the first instance creating a walking and cycling route may be the objective with restoration following alongside. However, across the depot site it is important that the walking and cycling route does not impinge on reinstating the canal.

#### *Potential economic benefits from visitors*

Research elsewhere (citation required) indicates visitor numbers of the order of 100,000 per mile on popular canals, of whom one third spend an average of £10 per visit that would not otherwise have been spent in the local economy. These figures include popular locations such as Bath and Oxford as well as major regeneration sites and rural lengths of canal: they will not be representative of the post-industrial backwaters of the Black Country for example, nor perhaps of an isolated canal in the Swansea Valley.

However the popularity of other lengths of canal such as the Neath Canal at Resolven, when the trip boats have operated, suggests that significant visitor numbers might be achieved. Almost any canal trip boat might reasonably expect to carry 15,000 passengers a year assuming the vessel has sufficient operating capacity and works school holidays and weekends for the summer six months.

We have assumed that the length of canal here might attract a very conservative 100,000 visitors across the whole length, which would lead to a visitor spend of the order of £330,000 to be captured by local businesses.

On top of this would be revenue from those who pay a premium for access to the water by hiring a day boat or canoe, or by bringing their own light vessel and slipping it on the canal.

Whilst at this stage it is very much a finger in the air estimate, the prospect of £500,000 spend in the local economy is not unrealistic, and would be readily achievable given sufficient opportunities.

### *Summary*

The overall benefits can be summarised as an improvement in the visual and amenity value of the corridor, especially between Coed Gwilym and Clydach, to the benefit of local residents and visitors to the area. This improvement can be promoted by, and in turn used to encourage the regeneration of development sites in the Clydach area, most especially the depot and the canal side in the vicinity of Mond Lock.

The overall improvement of the canal all the way to Pontardawe Playing Fields will assist in regeneration and restoration along the whole length of the canal, creating an attractive corridor for water born users as far as the playing fields and attractive walk from Clydach Centre to Pontardawe Centre.

These features will allow the promotion of the use of the waterspace by powered and unpowered boats and the use of the bank by a greater range of visitors. Whilst it is not the role of this study to evaluate the economic impact of these and the regeneration of the site, there is little doubt that an attractive and popular local canal acts as a stimulus for existing local businesses and the promotion of new ones.

## 8. Funding and Developing the Proposal

This report simply identifies (and gives a costed estimate) for the minimum works to be done to create a navigable canal from Clydach to Pontardawe Playing Fields. Alongside this the report gives qualitative reasons why this proposal would be useful and offer benefits to the local community.

With a total capital cost in excess of £6 million clearly more justification is required before significant works are achieved. The proposal overall needs more development and also more political impetus. From this point of view it is helpful that the canal is in the ownership of BW/CRT, rather than in separate hands along its length, as this means that a single body has responsibility for the management of the canal, and that body can assist in negotiations with the relevant authorities and promoting use of the canal.

Whilst the cost of the overall project seems high for just four kilometres of largely intact canal, the biggest single item is dredging and the disposal of contaminated waste. The latter was dealt with to great effect on the neighbouring Neath Canal by gaining grants for the removal of contaminants. The restoration work on many canals shows that dredging of non-contaminated lengths is practical by volunteers given the right equipment and training. In addition the experience of the Cotswold Canals near Stroud shows that with imaginative value engineering and negotiation such costs can be brought down quite significantly.

The 2002 study was a broader study of creating a network that paid only a fairly small amount of attention to the length under discussion in this report. It is assumed that this was because this length was comparatively straightforward compared to the major issues faced with connecting Clydach back to Swansea. However the 2002 study led directly to the restoration of lengths of the neighbouring Neath Canal. Comparisons may be made with the fact that the Neath Canal is in entirely in Neath-Port-Talbot CBC, but in the case of this length of the Swansea Canal, the entire length (except through the depot) is owned by BW/CRT and unlike the Neath Canal, which is owned by a private Company, BW/CRT are able to apply for grants themselves.

All other things being equal, first steps would be to devise a phased programme starting with works that can be done by volunteers and at a relatively low price by contractors. Volunteers are already doing much work in keeping the canal tidy and a logical next move would be to extend this to improvement. Organisations such as the Waterway Recovery Group (WRG) can advise on their capabilities. For national groups such as this, the possibilities go well beyond simply bank tidying and brush cutting. WRG have undertaken significant works that normally require contractors, such as rebuilding locks on the Wilts and Berks Canal, and have both a stonemasonry and forestry branch. The project, showing progress, would hopefully gain political momentum which would lead to funding through the various agencies.

However, at this stage all things are not equal. The Depot site is likely to be redeveloped and include a Sustrans cycle path and the building between the depot and the Mond are coming towards the end of their life with redevelopment apparently being mooted. This creates the opportunity for a Mond/Depot Canal Quarter that looks towards a revived canal rather than backs onto it. This could

create an opportunity for Clydach to gain a higher value development and begin to create links between the town and the canal. Care needs to be taken that development is compatible with the local community, but a developer seeking a long term investment will favour higher quality over a simple rapid redevelopment of the site.

Thus the first stage should be to seek to engage with developers and planners seeking to draw up a sketch vision of the canal as a whole with ideas regarding the proposed development sites. This is beyond the scope of this report but a suitable urban designer could create sketch ideas. This report presents a basic framework from which other work can follow.

With regards to costs, at first sight reinstatement of the canal across the depot is one of the less expensive elements of the scheme, mainly because the length is so short and the canal largely intact underneath the depot service. Normally an obstacle such as this would be the last item to be restored, in this instance, it could be the first.

With regard to funding and development one problem is that funding sources change continuously and thus it is felt better to offer an overall picture rather than recommend specific grant regimes. One point that should be made is that almost no funding agencies, with the possibility of IWA, fund waterway restoration for the sake of restoration, most will need a set of defined benefits to the economy or community to be offered

#### *Welsh Government*

The Welsh Government is the major funder behind economic and social regeneration in the Principality, directly, through their role with local authorities and through their role in assisting in securing European funding for projects. From this perspective the political support of the Welsh Government is almost as important as the financial support

#### *Heritage Lottery Fund (HLF)*

HLF support projects that retain and restore items of local, regional and national importance and that also offer participation and access to heritage. Although most grant regimes change one constant factor for HLF has been a threshold between those projects drawn from the regional budgets (in this instance, Wales is a region of the UK) and those drawn from National budgets. Currently the threshold is £5 million. Given that the overall budget is currently predicted to be just over £6 million, and that HLF normally have a maximum of 75% funding (i.e. 25% from elsewhere) it is unlikely that this project would be funded nationally. However it would be a significant grant for the region and as such would require a well researched and competitive grant application, which may benefit from being broken down into smaller stages

#### *European Union*

The current round of European funding ends in 2013: the 2014 -2020 funding round is now under consideration. The expectation is that Wales will continue to be a net beneficiary of EU Structural

Funds, but at present the objectives of these funds is unclear in how they might benefit canal restoration.

#### *Local Authority*

The length of canal in question straddles two local authorities, Neath-Port-Talbot CBC and Swansea City and County. In the current climate it is doubtful that either have large amounts of money to spend on the works, but both do have a political impact and control over development proposals in their area. From this perspective, it is important that the two authorities are persuaded of the merits of the scheme (not always easy when a scheme is cross boundary) and are encouraged and lobbied to give what political and practical help they can.

#### *British Waterways/Canal and River Trust*

Unusually for an abandoned waterway so far from the main canal system this length of canal was owned and administered by British Waterways (BW) under the Transport Act of 1948 (The canal had previously belonged to the Great Western Railway, which was nationalised in 1948) and has now transferred to the Canal and River Trust. The Canal and River Trust (CRT) have taken over BW's responsibilities for managing and maintaining navigations, with the waterways themselves belonging to the Waterways Infrastructure Trust, an arm's length body charged with holding the assets whilst CRT manage them.

It would be wrong to suggest that CRT is likely to funded to the extent that they could restore the canal: indeed it is understood that in this instance their obligations are limited to those BW had for a remainder waterway: that is, interest of public safety only. That said, it is worth noting that the majority of remainder waterways under CRT's control are navigable, and have in some instances been restored to navigation under BW guardianship. The most obvious example of this is the Kennet and Avon Canal, which was reopened in 1990 despite being a remainder waterway.

However, CRT replaced as unified operators of the length of the canal, and the ownership remains unified under another trust. The aim of CRT is to hold the waterways in trust and within the limits of their resources they will also be looking to develop the waterways they hold. CRT has the capacity to negotiate and campaign as well as to seek external funds for the waterways under their charge.

#### *Summary*

There is a long way to go in developing these proposals, and this is only the first outline stage for this specific length of canal. The opportunity presented by regeneration is, unusually, likely to be the leading initiative but more detailed plans, and a detailed analysis of benefits for the whole length would make the proposals more likely to succeed.

At this stage, the Swansea Canal Society has a cooperative working relationship with other organisations. It would be in the interest of the society in achieving these objectives to seek active

participation from other bodies such as CRT, with the society providing overall guidance on the canal objectives and other organisations providing the resources and political capital to deliver them.<sup>9</sup>

## **9. Summary and Conclusions**

This report examines at outline level the practicality, cost and potential benefits of restoration of the Swansea Canal from Clydach to Trebanos. This length of approximately four kilometres is assessed as a free standing scheme although it could also form part of the restoration of a longer length of canal if that were to proceed.

The restoration is straight forward from an engineering perspective: the only significant obstacle is the infilling of the canal route across the depot site, and the canal line is more or less clear across this. The works to conceal the lock have, as far as can be ascertained, also worked to preserve it

The overall cost of the scheme is estimated at some £6.3 million: the largest single cost is dredging, with a cost of £1.7 million plus additional costs which bring the overall sum for this item to £2.7 million. The next largest items are the two locks at Trebanos and re-establishing the route through the depot, each at around £1.2 million plus additional.

Aside from increased visitor numbers and consequent visitor spend in the immediate area, the principle benefits are the tangible and intangible benefits of regeneration at the depot site and in the Clydach area. There is potential here to create a canal quarter that could lift the area in terms of social amenity as well as economically. Such an initiative has much to recommend it but only makes sense if the canal is restored to navigable condition. Simply recreating the canal across the depot site without improving the rest of the length would diminish any regeneration benefits.

At present day values the depot site is unlikely to come forward without assistance in terms of grant aid and similar. It is difficult to envisage the site as anything other than a low value use similar to its present use unless the canal is reinstated. The presence of the canal across the site makes any development over the line difficult.

Visitor benefits would come in the form of increased activity leading to extra spend within the area. Given appropriate support new and existing businesses could develop to serve the increased visitor market. A potential visitor spend of £500,000 per annum has been identified.

In addition part of the costs of restoration would be spent in the local economy.

To progress regeneration in Clydach and restoration of the canal an alliance of local interests is required to campaign and promote these objectives. Key partners in this are the Swansea Canal Society, CRT and the two local authorities. CRT's involvement is critical in view of their ownership of the canal and the fact the length is split between two local authorities