

**BUSINESS CASE FOR THE DEVELOPMENT  
OF THE DYFFRYN HOUSE SITE**

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## **A BUSINESS CASE FOR THE DEVELOPMENT OF THE DYFFRYN HOUSE SITE & OFFICES**

### **1. EXECUTIVE SUMMARY:**

The purpose of this document is to present Cabinet with a business case for the development of the Dyffryn House Site viz waste transfer infrastructure and possibly Civic Amenity Facility on a phased basis.

The Authority has an urgent, operational need for modern, fit for purpose waste transfer infrastructure that is in a suitable location and of a suitable size to accommodate current and future waste arisings, collection methods, treatment and disposal destinations and any emergencies (weather related or otherwise). In addition to significant operational needs, there are financial consequences and significant reputational risks associated with doing nothing.

In the longer term, the complete development of the Dyffryn House site to include a large, modern, fit for purpose civic amenity (CA) site would facilitate the closure of the Trehir CA Site (and removal of various liabilities associated with the Trehir site) and potentially the closure and sale of the Penallta CA site. This would allow the rationalisation of CA site provision and resultant associated cost savings. Again, these are outlined in this business case.

### **2. INTRODUCTION/BACKGROUND:**

The Dyffryn House site is situated within the Dyffryn Industrial Park, Ystrad Mynach and was constructed as a paper/magazine printing centre under the ownership of St Ives. The site is large with office space, extensive covered storage/production areas with heavy foundations and surrounding undeveloped land.

On the 22<sup>nd</sup> November 2005 Council agreed to the acquisition of the St Ives site for the specific use “as a waste treatment and recycling plant”. In December 2005 the council purchased the site from St Ives at a cost of £5.2m.

That Council decision was founded upon a Cabinet Report (18<sup>th</sup> October 2005) where it was stated “the purchase of the premises will contribute to the achievement of the aims and policy directions of the National Waste Strategy and EU Landfill Directive”.

The St. Ives acquisition formed the key part of a procurement for waste treatment technology at that time but this concluded without a contract being awarded (Cabinet decision – June 2007)

The Living Environment Scrutiny Committee (5/5/09) and Cabinet (9/6/09) considered reports on “Strategic Facility for Waste Transfer & Bulking of Recyclables”. These reports outlined the economies of direct delivery v waste transfer that were relevant at that time and considered a range of siting options. At the time the views of the Scrutiny Committee were sought prior to the report being considered by Cabinet and Scrutiny Committee accepted the need for a Waste Transfer Station (WTS) and recommended Ty Duffryn as the preferred site. At the meeting on 9<sup>th</sup> June 2009, Cabinet resolved to defer any decision pending further information on costs, etc.

Finally, on 21<sup>st</sup> July 2009 Cabinet considered a further report and resolved that it would recommend to Council that Trehir be selected as the preferred site for a WTS. Council then considered this recommendation on 28<sup>th</sup> July 2009 but deferred any decision after it was resolved to seek further information on certain aspects. On 6<sup>th</sup> October 2009, after consideration of additional information, Council resolved that Trehir be chosen as a preferred site for a WTS.

Since purchase the primary use of Dyffryn House has been as replacement offices for the demolished Ystrad Fawr offices. The offices were utilised for various council services between the closure of Ystrad Fawr and the opening of Ty Penallta and beyond. The storage/production area is being largely utilised by Community & leisure Services (for bin storage) but there are also a range of other departments storing items in the premises.

In terms of private sector interest in the site, there have been various approaches made to the Authority but none have resulted in firm proposals, although officers have never been instructed to formally market the site.

These approaches include:-

- Two agents - enquired “on behalf of clients” but nothing developed from those initial approaches.
- Between 2007 and 2008, Company A rented part of the rear warehouse. There were some desultory discussions about selling the site.
- In 2008 Company B expressed an interest.
- Also in 2008, we had an approach from Company C, which was considering consolidating its 4 sites in the area onto one.
- At or about the same time, Company D was tentatively interested.
- Company C had no short term requirements and Company D were looking at a longer term proposal as he had a large property portfolio on Pen-y-fan
- In 2009, Company E expressed an interest to expand from its site at Aberbargoed, but opted to relocate to Pen-y-Fan
- At, or about the same time, an unnamed company toured the site with officers from Welsh Government

- In 2010, Company F explored the possibilities of relocating from its site at Pontllanfraith; this proved abortive
- Company G expressed interest during 2010, but nothing further developed
- In 2011 Newport Gwent Dragons showed initial interest in developing an indoor Training Facility.
- At or about the same time, a Go Carting Co was interested in the premises as a Go Carting Venue.
- Company H had an industrial requirement for which we put Ty Dyffryn forward on a confidential basis.
- Gwent Police was interested in developing a joint Fleet Management Centre with the South Wales Police Force in September 2011.
- In April 2014, Company I expressed interest in purchasing the site for a private manufacturing company. A visit was arranged via Brinsons but no further response has been received.

At the meeting on 15<sup>th</sup> January 2013 Cabinet agreed to the following:

1. A planning application be submitted for the proposed change of use of Dyffryn House.
2. A financial proposal be prepared for consideration by Council once planning permission is secured.

The reason for the above decisions were “To ensure that Dyffryn House is used effectively and that Waste Transfer infrastructure is developed to service new waste contracts”

Potentially the Dyffryn House site could also be developed to replace the civic amenity site at Trehir, which would enable the Trehir site to be returned to open countryside and the existing Bailey bridge to be removed and sold. This in turn would relieve the authority of a significant liability.

Subsequent discussions with Planning Services have confirmed that a planning application for change of use should be made supported by a detailed Environmental Impact Assessment (EIA). The costs of this work, mainly through internal consultancy and environmental consultants fees has been funded from a Capital budget of £900k which formed part of the 2012/13 capital programme.

Officers from Planning Services have further advised that the most appropriate course of action in terms of a Planning Application for the site is to submit an all encompassing application which should include ancillary uses (such as depot, vehicle parking, etc) in case they are required in the future. The site would then benefit from 2 Planning permissions until such time as any of the permissions (or parts thereof) are implemented via physical works on site (any new permission would expire within 5 years).

In order to assist CMT & Cabinet with decisions relating to Dyffryn House, it is suggested that the development could be phased as follows:-

- **Phase 1** – Development of Waste Transfer Station based on a very urgent operational need (covered in more detail below)
- **Phase 2** – Development of a Civic Amenity Site to replace the Trehir & Penallta CA Sites (including the potential to realise a capital receipt from the sale of the Penallta Site).

### **3. STRATEGIC & MANAGEMENT CASE:**

#### **(i) Waste Transfer Station (WTS)**

##### **Existing facility**

Currently the Authority utilises the Waste Transfer Station at Full Moon, Crosskeys to bulk its residual and recycling waste prior to onward transportation for disposal/treatment. The Waste Transfer Station is on the same site as the Civic Amenity Site and is undersized when compared to current requirements. It often suffers from exceeding its capacity especially during sustained periods of inclement weather, increases in throughput, breakdown of loading equipment or delays with hauliers moving waste out of the facility. The delays are particularly a problem now we are bulking recycling on the site as we often have to hold materials for longer periods of time whilst we find outlets with sufficient capacity to deal with our materials.

Historically, the WTS at Full Moon was designed to handle 30,000 - 35,000 tonnes of waste per annum from the Islwyn area. Typically the Waste Transfer Station now regularly handles 50,000+ tonnes (ie: 30,000 tonnes residual + 20,000 tonnes DMR).

In addition to the existing Waste Transfer Hall at Full Moon, last year we constructed another external bulking facility (which included a walled bay with netting to contain any windblown litter) to accommodate our Dry Recycling. This was only ever intended to be a temporary arrangement until we had a fully contained waste transfer facility of sufficient size to deal with all our waste fractions and one of sufficient capacity to hold larger quantities of waste if we experienced any delays.

Whilst the bay constructed was originally designed for the bulking of the Dry recycling we have found if there are delays in moving the materials (and this coincides with wet weather) the materials are becoming saturated and therefore undesirable for re-processors who then either refuse to accept the materials or charge premium rates for the treatment (this can be £50/tonne higher than the normal rate of £40 - £50 per tonne paid) i.e. a doubling effect.

Whilst we are in the process of installing a roof over this bay we have an agreement until August 2014 with Natural Resources Wales to switch the waste fraction so the residual is tipped in the bay and the dry recycling is tipped in the Waste Transfer hall. This helps to keep the materials dry in part

and also enables our employees to remove black bags and other non-targeted materials. However, over the Christmas holiday period we had to use the whole facility (both external bay and hall) to store the recycling collected whilst our residual waste was diverted to Newport. To put this situation in perspective, the Full Moon site only has the capacity to store circa 300 tonnes of material (approximately 2-3 days collections. Once this capacity is reached all material (including recyclables) would need to be landfilled.

In the past there has been some uncertainty regarding the end destinations of our various waste streams. As time has progressed and we have reached more advanced stages in our various procurement exercises we can make more confident predictions on the need for a Waste Transfer Station that can cope with all waste streams (Residual, Dry Recycling, Food, Green, Mechanical Sweepings, Litter Picking/street cleaning and CA site materials for secondary sort, etc.)

The following summarises the current situation with existing disposal/treatment arrangements and highlights the issues facing us in the future

### **Residual Waste**

The Authority collects over 30,000 tonnes of domestic and commercial waste per annum (approximately 600 tonnes per week) with the vast majority of this waste being deposited at Full Moon prior to transfer to Trecatti landfill site (just outside the northern boundary of the county borough). The return journey takes between 1.5 and 2 hours for a bulk haul vehicle carrying the approximate capacity of 3 refuse vehicles (just over 22 tonnes). The cost of this transfer is about £8 per tonne or £176 per bulk load. Unfortunately direct delivery to landfill is not an option for the majority of our rounds as we utilise rear steer vehicles as they achieve higher payloads and are more suitable to access some of our very tight streets/rear lanes but with the rear steer they are not suitable to take onto landfill sites.

The situation is of course compounded when we divert this waste to Cardiff Bay (the new Prosiect Gwyrdd (PG) Treatment Contract) as it is further away and there is more likelihood of vehicles being delayed in traffic especially at peak times. It is likely that PG will commence an interim service later this year and in preparation for this we will be jointly procuring a haulage contract with the other partners over the coming months. In order to understand the economics of direct delivery V bulk transfer to the Project Gwyrdd site the following calculations have been made based on the County Borough being divided into 3 geographical areas of similar population (see appendix 1).

- A Northern Borough – covering Ystrad Mynach to Rhymney – midpoint Bargoed – approx. average 18 miles to PG
- B Southern Borough covering Caerphilly basin from Aber Valley to Machen and up to Llanbradach – mid-point Llanbradach – approx. average 13 miles to PG
- C Eastern Borough – from Hollybush to Crosskeys – mid- point Abercarn – approx 18 miles to PG

As the 3 areas have similar populations it is safe to assume they each produce 33.33% of the LA Waste – about 11,000 tonnes per annum per area.

For the purpose of these calculations any additional direct delivery costs associated with delivery to Trecatti, Full Moon or Ty Duffryn WTS's are determined to be cost neutral as they all have compensating savings against increased costs i.e. each one is based in or immediately adjacent to one of the 3 geographical areas above.

The main additional costs are incurred with either direct delivery by RCV to PG or transfer and bulk haulage to PG.

- **Direct Delivery via Refuse Collection Vehicle (RCV):-**

The current cost per hour for an RCV collecting Residual Waste is £74

Area A – if this return journey takes approximately 2 hours and transfers 8 tonnes per load with 2 loads per day then this equates to an annual cost for 11,000 tonnes of £203,500.

Area B - if this return journey takes approximately 1.5 hours and transfers 8 tonnes per load with 2 loads per day then this equates to an annual cost for 11,000 tonnes of £152,625.

Area C – if this return journey takes approximately 2 hours and transfers 8 tonnes per load with 2 loads per day then this equates to an annual cost for 11,000 tonnes of £203,500.

**TOTAL COST OF RCV TRANSFER £559.625**

Although for the purpose of this calculation we should discount the additional delivery cost (i.e those already included for delivery to WTS) as this is already accounted for in the overall service costs which are budgeted for so the additional delivery costs to PG via RCV will be  $3 \times 152,625 = \mathbf{£457,875}$

- **Transfer and Bulk Haulage**

As stated above the cost of delivery to the existing WTS should be discounted for this purpose so the additional costs of bulking and bulk haulage will be:

Bulking Materials at WTS estimated £3 per tonne x 33,000 = £99,000

Bulk Haulage estimated £8 per tonne x 33,000 = £264,000.

**Total = £363,000 Bulk**

Based on the above calculation, it can be seen that the bulk transfer/haulage of residual waste is some £95,000 (£457,000 - £363,000) per annum less than direct delivery of residual waste via RCV's. Appendix 2 includes an alternative calculation method which has been used to verify the calculations.

Obviously, the above calculations suggest that bulk haulage will cost £363,000 more, however it does not follow that additional revenue budget of this level is required as there is an existing bulk haulage budget of £250,000



(linked to haulage from Full Moon WTS) which can be offset against the additional revenue costs. This would therefore limit the additional revenue requirements to circa £150,000 which would be required for Transfer and Bulk Haulage.

In addition to the financial issues outlined above, there is a significant impact in terms of carbon emissions associated with Direct Delivery – there is probably a trebling of carbon emissions if direct delivery is employed over bulk haulage.

### **Dry Recycling (DMR)**

The Authority collects between 18,000 and 21,000 tonnes DMR per annum (approximately 400 tonnes per week) and whilst it is lower by weight, it is of greater volume than residual waste, as it is not so densely compacted.

The Authority is not currently in contract with a dedicated supplier for the treatment of its DMR and has over recent months experienced difficulty in securing consistent/cost effective outlets for its materials. Unfortunately as we have not had consistent outlets it has often created backlogs that have required storage prior to bulk haulage to treatment facilities. As a one off over the holiday period we had to hire a licensed factory unit (at a cost of £2,000 per week plus an additional £10 per tonne loading fee for about 200 tonnes) just to ensure we could continue collection. The Authority was extremely lucky to hire this, as any facility would not only need to have sufficient space but would need to have the requisite planning permission and waste management permit in place. The Authority has also come very close to this situation in its normal day to day collection business over recent months.

Current outlets for our DMR include destinations as far away as North Wales and Northern England so direct delivery is not an option but we do need a transfer facility capable of storing and transferring ever increasing tonnages as we improve our participation and recycling performance. It is crucial that this material is stored in the dry as the recycle reprocessing market has changed such that demand for wet or contaminated recyclables is low or sometimes does not exist – the result is either the payment of premium reprocessing rates or direct landfilling.

### **Food/Green**

The Authority currently collects approximately 12,000 tonnes of combined Food/Green waste from households per annum (varying from over 100 tonnes per week in the winter to nearly 300 tonnes per week in the Summer (due to the seasonal increase in green) with a further 2-3,000 tonnes of Green waste from our CA Sites.

In the past this has never been an issue as the facility treating our food and green waste is located within the county borough so there has been no need to bulk transfer the materials.

There are of course some operational/license compliance difficulties at the site and the operator has recently been served a notice by Natural Resources

Wales (NRW) restricting the amount of food waste he can deal with at the facility.

The Authority is in a Procurement hub with Blaenau Gwent and Torfaen Councils for the longer term Heads of the Valleys Organics contract. However, due to a variety of reasons this procurement has collapsed and a new hub procurement will need to now commence. Consequently, it is unlikely that this contract will be available before 2017/2018 and a new procurement will present risks in terms of uncertainty over destinations as CCBC do not have any ability to transfer food and green waste. In the short term, we will need to procure a new Interim Contract for our food and green waste covering the period until the new Heads of the Valleys contract is available.

While the current operator has worked with NRW, there is always a risk that his compliance is jeopardised in the future and further action is taken against him.

The current contract is due to expire later this year and it is quite likely when we procure a new interim contract that the current provider (accepting the issues identified above) could be successful. If this is the case then we would have no immediate need to transfer the food and green waste.

Alternatively if the restrictions put in place by NRW or any other limitations on capacity preclude our current contractor from securing this contract then it is almost certain that the waste will need transfer out of the county borough and with limited local facilities it is quite likely the treatment will take place somewhere in England.

Unfortunately, the limited capacity at Full Moon will preclude us from developing a transfer facility for food and green at this site without major engineering and construction works, which will include the closure/relocation of the CA site. If this option is to proceed it could not be delivered by the end of the year due to the complexities involved in preparing a planning application, securing planning permission and then undertaking the construction works. The budget cost would be in the region of £1,250,000 (and this does not include the new CA Site if it is concluded it should be replaced which will probably be between an additional £700,000 and £1,000,000).

In reality, the interim solution that would cause the least problems is to procure with the current contractor being successful. Whilst this buys us time it is only a delay and should not be seen as an option to do nothing.

### **CA Materials for secondary sorting**

The Authority currently collects approximately 12,000 tonnes of residual materials from its 6 CA Sites that are direct delivered to a local contractor (within the county borough) where it is secondary sorted and approximately 70-80% of the materials are recovered for recycling.

We have a similar issue with this fraction of waste as with the food/green i.e. in the past there has been no need for transfer and when the contract is let next year it is quite likely that the local contractor (if their treatment cost is

competitive) will be successful again. Of course if there are any issues with this contractor (not able to submit tender, restricted by NRW, become uncompetitive) then we will have nowhere to bulk the materials for onward transportation.

### **Litter picking waste**

The Authority collects approximately 2,000 tonnes of litter picking waste per annum and the materials are treated in the same way as the CA Materials in that they are secondary sorted by a local contractor and again if this local arrangement was not in place it would require a bulking facility prior to onward transportation.

### **Mechanical Sweeping Waste**

The Authority collects in excess of 3,000 tonnes of Mechanical Sweeping Waste per annum and due to legislative changes made several years ago the arisings must be dewatered prior to disposal/treatment. Up until last year the dewatering was undertaken at the facility provided by NCS at Coed Tophill and the outputs sent for mixing with green waste at our Green/Food Waste contractor so the outputs also counted towards our composting figures. Unfortunately last year the NRW decided that it was no longer acceptable to use the arisings in this way and they are now taken to a facility in Cardiff where they are diverted from landfill but cannot count towards recycling. The cost of this service has escalated from approximately £100,000 last year to nearly £300,000 this year although it is our plan to procure a new contract during the coming year that will hopefully result in reduced costs.

There are other facilities around the country that are licensed by NRW to treat these arisings so they count towards recycling but these again will require a facility to store, dewater and bulk the materials prior to loading and onward transportation for treatment.

### **(ii) CA Site**

The Authority currently operates 6 CA Sites (Trehir, Penallta, Aberbargoed, Penmaen, Rhymney & Crosskeys). In the last 2 years the Wales Audit Office has undertaken a benchmarking study into CA Site services across Wales and has provided a report and recommendations for each Authority. The Caerphilly report suggested that the Authority provides too many sites and should consider rationalisation of provision. Dyffryn House presents an opportunity to commence this rationalisation process by closing the Trehir and Penallta sites and opening a new, modern, fit for purpose facility on the rear area of the site. This would realise operational financial savings as well as allowing the Penallta site to be offered for sale. In addition, the Authority could return the Trehir Site to open green space and remove the bailey bridge liability (which carries fairly significant maintenance costs).

#### **4. ECONOMIC CASE:**

##### **(i) Waste Transfer Station**

Failure to develop modern fit for purpose WTS infrastructure carries significant service delivery and reputational risks, including:

- Inability to transport waste over long distances (eg: recyclables to UPM Shotton)
- Inability to deliver waste in accordance with contractual requirements (eg: where the contract has been predicated on bulk delivery) (eg: Project Gwyrdd) and consequently contractual disputes and/or financial consequences could arise.
- Risk to maintaining collection services when there is a lack of capacity to store or transfer wastes and recyclables.
- Risks associated with procurements for future waste treatments (eg: interim organics)

In economic terms, direct delivery is not an option for Dry recyclables as there is little or no local infrastructure currently available. While additional vehicles and crews could be employed to enable direct delivery to Project Gwyrdd, this would result in additional costs as outlined earlier in this business case. The outcome of the interim procurement for food & green waste will dictate the short term need for food waste transfer infrastructure, although in the long term (2017/18 onwards) there will be a definite need. In addition, failure to have a suitable WTS available presents a significant risk in the event of problems with any interim contract.

##### **(ii) CA Site**

The Authority currently operates 2 CA Sites (Trehir & Penallta) within a 2 mile radius of the Dyffryn House site. The opportunity to rationalise this provision on one site (Dyffryn House) would result in savings being realised from a reduction in manpower and certain fixed cost savings (NNDR, energy, NRW permitting, etc.). It is anticipated that these savings would be circa £100,000 per annum.

## 5. FINANCIAL CASE:

Budget costs have been prepared on the basis of the proposed development :

### Capital Costs Expenditure:

**Phase 1** (Waste Transfer Station) – Time is of the essence; there is an urgent need of provision.

WTS including weighbridge (detailed estimates provided by a specialist WTS Engineer)	1,000,000	
Internal ramp for food waste Unloading	139,000	
External works (apron overlay, drainage, lighting, signage, security & CCTV)	320,000	
	<b>1,459,000</b>	<b>1,459,000</b>
<b>Professional fees</b> 2014/16	175,000 (Est)	
	-----	
	<b>175,000</b>	<b>175,000</b>
<b>Total Expenditure</b>		<b>1,634,000</b>
<b>Income/Existing Budgets</b>	<b>800,000</b>	
<b>Capital Budget 2013/14 (remaining amount see note below)</b>		
<b><u>Net cost</u></b>		<b><u>834,000</u></b>

**NB:** There was capital budget of £1m provided in the 2012/13 capital programme and the subsequent 2012/13 and 2013/14 costs of professional fees (for design and EIA preparation) were met from this budget. There is consequently circa £800,000 of this budget remaining which can be used to part fund the development.

**Phase 2** (Civic Amenity site) – Not constrained by time. This represents a potential Prudential Borrowing Case

CA site	1,030,000	
Bridge & access road to future CA area	130,000	
Demolition of 2 existing CA Sites	50,000 (est)	
	-----	
	<b>1,210,000</b>	<b>1,210,000</b>

## 6. OPTIONS ANALYSIS:

Given the phased options outlined above, this section is also divided into 2, namely,

- Waste Transfer Station
- C A Site.

### (i) Waste Transfer Station

- Do Nothing

In addition to significant operational needs, there are financial consequences and significant reputational risks associated with doing nothing.

Failure to develop modern fit for purpose WTS infrastructure carries significant risks including:

Inability to transport waste over long distances (e.g. recyclables to UPM Shotton)

Inability to deliver waste in accordance with contractual requirements (e.g. Project Gwyrdd) and consequently contractual disputes and/or financial consequences could arise.

Risk to maintaining collection services when there is a lack of capacity to store or transfer wastes and recyclables.

Risks associated with procurements for future waste treatments (e.g. interim and long term organics).

While do nothing is not a medium or long term option (for the reasons outlined above) it would be a requirement while new WTS infrastructure was developed (0-18 months) to manage using a combination of Full Moon WTS, external providers and additional vehicles. This short term period would not however be without risk.

However, it is hoped that this risk could be managed for this relatively short period. Management of the risk for the first 6-9 months of 2014/15 would be assisted by:-

- Any Project Gwyrdd Interim Contract not commencing until October 2014
- A new interim Organics Contract not commencing until December 2014
- The urgent erection of a roof over the open storage area at Full Moon, to ensure that recyclables are kept dry.
- The use of additional vehicles as and when required.

The risks would then increase from November 2014 as interim arrangements change with the potential for additional costs and practical service delivery issues.

- Develop new WTS infrastructure at the Full Moon Site, Crosskeys.

The current, small WTS at Full Moon is undersized when compared to current requirements. Expansion of WTS infrastructure would necessitate the removal of the CA Site and either its relocation elsewhere in the Southern Sirhowy Valley (at a cost of £700,000 - £1m) or acceptance that

no future CA provision will be provided in this part of the County Borough. Additional WTS infrastructure (additional building and associated civil engineering works) has been estimated (by the Authority's in-house Engineering Consultancy) to cost £1,250,000 (£1,092,000 works cost + fees of £158,000). Consequently development of new WTS infrastructure at Full Moon including replacement of the CA Site is likely to cost upwards of £2m plus land acquisition (for a new CA Site) costs.

Initial discussions with Highway Maintenance have identified that should the Full Moon WTS be vacated, the site could form an important strategic base for salt storage and distribution in the Western Valley.

- **Trehir**

There is no doubt that the existing Trehir site remains a viable option to Dyffryn House. The site has a long established use as a waste facility and is situated where its impact upon residents and businesses is least. There is a current council decision (6<sup>th</sup> October 2009) that Trehir be chosen as a preferred site for a WTS. Costs associated with development at this site had previously been estimated and reported at between £4.9m and £5.95m dependant on bridge design to replace the existing Bailey Bridge. However, this cost was for WTS provision only. More detailed estimation work to include bridge, WTS & redesigned CA Site at Trehir totalled £7.65m (November 2010).

- **Other alternative sites**

The reports to Scrutiny, Cabinet and Council in 2009 identified a number of alternative siting options for sites within the Authority's ownership and provided advantages, disadvantages and estimated costs for each option. The information in these reports is still relevant to the business case, accepting that the costs may need to be inflated to take account of construction cost inflation over the last 4-5 years. Extracts from this Scrutiny Report are included as appendix 3.

(ii) **CA Site**

As outlined above, the Authority has received a WAO benchmarking report on its CA Site service and Dyffryn House represents a significant opportunity to rationalise provision and realise savings of £100,000 per annum. The other options available include doing nothing, accepting the WAO comment and not achieving any savings. However, the do nothing option leaves the Authority with maintenance liability associated with the Trehir Bailey Bridge (circa £40,000 has been spent on the Bailey Bridge in the last 5 years with a further full survey and refurbishment due in 2015/2016).

The final option is to close 1 or more sites without putting alternative provision in place.

## 7. **CONCLUSIONS:**

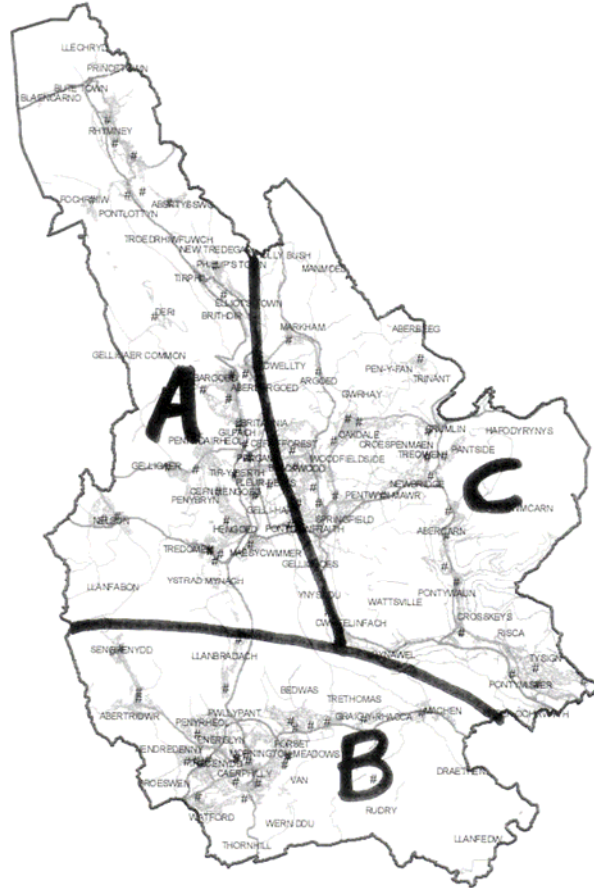
There are a number of key conclusions arising from this business case. Namely:-

- (i) There are significant strategic and operational needs for a modern, fit for purpose WTS.
- (ii) There is a long history of debates and decisions by Members in relation to waste transfer infrastructure but nothing has been delivered “on the ground”.
- (iii) As a result of the risks (short & long term) associated with the lack of a suitable WTS, an early decision that provides clarity & certainty over future WTS provision is required.
- (iv) The Dyffryn House site clearly offers the opportunity to deal with the WTS and CA site rationalisation on a phased basis.



APPENDIX 1

CAERPHILLY COUNTY BOROUGH



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## **APPENDIX 2**

### **COST/TONNE & COST/TONNE/MILE CALCULATIONS**

#### **(1) RCV**

RCV Cost/Tonne = £74 RCV/Cost/Hr X 1.5 Hrs) ÷ 8 Tonnes = £13.87/Tonne

RCV Cost/Tonne/Mile = (£74 RCV/Cost/Hour X 1.5 Hrs) ÷ 8 Tonnes ÷ 13 Miles  
= £1.07/T/M

#### **(2) BULK**

Bulk Cost/Tonne = £3 Transfer + £8 Haulage = £11/Tonne

Bulk Cost/Tonne/Mile = £11 ÷ 13 Miles = £0.85

Difference in Cost/Tonne/Mile = £1.07 (RCV) - £0.85 (Bulk) = £0.22

#### **Which equates to a total of:-**

0.22 x 13 Miles x 33,000 Tonnes = **£95,000**

## APPENDIX 3

### 6. SITING OPTIONS

- 6.1 Officers have examined a number of sites currently in the ownership of the Authority for the siting of a waste transfer/recyclable bulking facility. In addition, the Head of Property and ICT has been asked to examine suitable private sector sites which are currently available on the open market. At the time of writing this report no suitable private sector sites have been identified. The relevant advantages and disadvantages of each site in CCBC ownership with comments relating to development costs have been summarised below:-

(i) Former Trehir Landfill Site

The former Trehir landfill site offers an opportunity to provide a wide ranging waste treatment and disposal facility. In addition to a Waste Transfer Station the site could also accommodate a revised and improved Civic Amenity site and offer the prospect of composting garden waste.

The most significant drawback is access. The Trehir Site is currently accessed by a Bailey Bridge which has been in place since the late 1980's (and which was purchased second hand at that time). A specialist engineers report on the bridge has revealed that it is in need of some urgent repairs (costing circa £20,000) but that in the longer term (beyond 5 years) a more thorough survey (which may conclude that replacement is required) should be carried

out. This is obviously irrespective of the future use of the site as a transfer facility although it must be accepted that development of a transfer facility at Trehir would put severe pressure on the Bailey bridge and early replacement may therefore be a more prudent option. If a transfer facility is not developed then it may be the case that the existing bridge life could be extended beyond 5 years to accommodate civic amenity site traffic. The relative advantages, disadvantages and costs associated with the Trehir Site are outlined below: -

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>▪ Proximity to A469 dual carriageway.</li> <li>▪ Site has had long term use as a waste facility.</li> <li>▪ Existing civic amenity site located at Trehir which is in need of improvement – therefore opportunity to integrate both developments.</li> <li>▪ Opportunity to develop associated operations such as composting of garden waste on site.</li> <li>▪ Long term opportunity to close the Full Moon Transfer Station and save resultant costs.</li> <li>▪ Remote nature of site.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Access to site relies on bailey bridge across River Rhymney. Recent study of this bridge by specialist engineers has revealed its fragility. A replacement bridge is therefore required for any long-term development at the site.</li> <li>▪ Size of site and topography will require specific design considerations.</li> </ul>
Financial Consequences	
<p>The costs of developing the Trehir Site are essentially two fold:-</p> <ul style="list-style-type: none"> <li>▪ Replacing the Bailey Bridge with a permanent bridge across the River Rhymney is estimated at £1.9m. Alternatively, a new Bailey Bridge is estimated at approximately £0.9m.</li> <li>▪ Building the waste transfer &amp; recyclable bulking facility. These costs have recently been examined by an independent engineer with specialist knowledge of transfer station design. A schedule of costs has been prepared which includes the development of the transfer facility and redevelopment of the existing CA Site (as the CA Site currently occupies the area of land that would be required for the transfer facility). The cost of the build is estimated at approximately £4 million (this includes a sum of circa £0.4m for diversion of a large, high pressure water main). The Head of Engineering Services has also commented that the highway surface (to access the site from the roundabout) is also in need of resurfacing (at a cost of circa £50,000) and <u>may</u> also need reconstruction (which would cost considerably more). This investment will be required even if the site is only used for civic amenity purposes. <u>However, it should be noted that these are only estimates and have not been based on any firm tender figures.</u></li> </ul> <p>The total cost of developing a facility at Trehir is therefore between £4.95m and £5.95m (dependant on bridge design – permanent structure v bailey bridge).</p>	

(ii) Ty Duffryn

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>▪ Proximity to A469 dual carriageway.</li> <li>▪ Building already exists so no need for new build to accommodate relevant infrastructure.</li> <li>▪ Opportunity to replace the Trehir CA Site at Ty Duffryn.</li> <li>▪ Opportunity to locate some or all</li> </ul>	<ul style="list-style-type: none"> <li>▪ Waste transfer/recyclable bulking would only require circa 1/3 of the existing building so use for the remaining 2/3 would need to be established.</li> <li>▪ Loss of saleable asset.</li> <li>▪ No obvious use for the remaining 2/3 of</li> </ul>

<p>depot operations at the site as well as waste transfer/recyclable bulking.</p> <ul style="list-style-type: none"> <li>Due to the strategic location of Ty Duffryn, there will be a long-term opportunity to close the Full Moon transfer station and save the resultant costs.</li> </ul>	<p>the building.</p> <ul style="list-style-type: none"> <li>The site has been the subject of public concern, albeit for a different purpose.</li> <li>Local industrialists have suggested that there could be job losses if this location is chosen.</li> </ul>
<b>Financial Consequences</b>	
<p>The costs of modifying the Ty Duffryn building are estimated to be £1.75m. These costs have been estimated using costs from other, similar facilities but without the benefit of any tendering exercise. The modification costs are obviously in addition to the acquisition costs estimated to be £1.3m of the purchase price for the area to be utilised. This gives a total cost of £3.05m.</p>	

(iii) Tiryberth Depot Central Stores Building

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>Existing refuse/cleansing depot located at site.</li> <li>Reasonable mid-valley location adjacent to A469.</li> </ul>	<ul style="list-style-type: none"> <li>Building currently occupied by building services as central stores. New facility would therefore be required for central stores provision.</li> <li>Immediately adjacent to a primary school.</li> <li>Access/egress difficult for articulated vehicles and would therefore require significant re-design.</li> <li>Depot already overcrowded and any loss of car parking as a result of access/egress re-design would cause further problems.</li> <li>Limited size of building <u>may</u> prevent future closure of Full Moon transfer station.</li> </ul>
<b>Financial Consequences</b>	
<p>The main costs of developing such a facility at Tir-y-Berth depot relate to internal alterations (to separate the office accommodation) and alter the roller shutter door arrangements. External costs include alteration to the access/egress/highway arrangements and installation of a weighbridge. No firm financial estimates have been established for this option. However, it is anticipated that the cost would be in the region of £2m-£2.5m.</p>	

(iv) Bedwas Highways Depot, Bedwas House Industrial Estate

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>Site is of size capable of accommodating infrastructure required.</li> <li>Potential to also relocate Trehir CA Site but this would require relocation of <u>all</u> highway operations.</li> <li>Potential to close Full Moon transfer station in long term.</li> </ul>	<ul style="list-style-type: none"> <li>Not in mid valley location, at Southern part of County Borough.</li> <li>Use of site will require some or all of the highway operations to be relocated (dependant on scale of development). This will obviously have a cost implication. In addition, removal/relocation of the salt barn (where required) may have an effect on the highway winter maintenance</li> </ul>

	<p>service.</p> <ul style="list-style-type: none"> <li>Local industrialists have indicated that there could be job losses if this location is chosen.</li> </ul>
<b>Financial Consequences</b>	
<p>It is estimated that the cost of developing such a facility at the Bedwas site is approximately £2.6m. No detailed estimating work has been undertaken in respect of the Bedwas site but the cost estimate has been derived from a breakdown of estimated costs for the Trehir option (above) less any costs associated with moving the Civic Amenity Site. The cost of relocation of highways operations is estimated at £200k (this includes relocating operations and providing a new salt barn but excludes any land acquisition costs).</p>	

(v) Full Moon Transfer Station, Crosskeys

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>Existing waste transfer facility.</li> </ul>	<ul style="list-style-type: none"> <li>Operationally in the wrong location at South Eastern Periphery of the County Borough.</li> <li>Development difficult due to size restrictions.</li> <li>Existing site would have to close for a period of 6-9 months while new development was completed.</li> <li>CA Site could not be accommodated if transfer facility was enhanced – a new CA Site would therefore need to be developed in a new location.</li> </ul>
<b>Financial Consequences</b>	
<p>The costs of modifying the Full Moon site to accommodate an enhanced waste transfer facility are estimated at £1.8m. However, the CA Site would have to be relocated due to the size restrictions on the site and there would consequently be an additional cost of approximately £0.75m - £1m <u>plus</u> land acquisition costs. Consequently the overall cost of developing the Full Moon site would be between £2.5m and £3m (plus land acquisition costs for the CA Site).</p>	