

Financial and Economic Land Appraisal Project

Output Report - Updated

August 2023





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Section 1: Executive Summary

In August 2022 the Board considered a financial and economic evaluation as a part of the land selection process for the new Urgent and Planned Care hospital. The number of sites under consideration reduced from 5 to 3.

This report provides an updated financial and economic evaluation. The assumptions and information included previously will be reviewed and revised where new information is available for the 3 sites currently under consideration. The following will be reviewed:

- The relative cost differential of building the new hospital on the different sites
- Any differential running costs
- Whether there are any differential economic impacts between the sites within the zone
- To flag the risks associated with accurately compiling costs at this point given the level of uncertainty.

This report highlights the processes and methodologies used, the external experts consulted and the results of the analysis. This can be summarised as follows.

Capital Costs

- Capital costs have been reviewed by our Cost Advisor, Gleeds
- Only differential costs associated with building on the different sites have been considered. We have not calculated the total cost of building a new hospital on each site for this assessment.
- A consistent methodology has been used for each site taking into consideration costs associated with - Land Purchase; Site Conditions; Site Topography; Site Drainage; In-coming Services and Off-site Highway Works
- From the costing undertaken the range of costs between the least and most expensive site is £24m - £32m.
- This could be considered significant when considered in isolation, however as a proportion of the overall estimated build costs the range is £580m - £588m (calculated as works costs of likely option plus land costs).
- There is a high degree of uncertainty at this stage due to a range of factors highlighted as potential risks that we are unable to quantify. A sensitivity analysis has therefore been performed to show how much costs would need to change for each option to change the rank order.



Section 1: Executive Summary - continued

Revenue Costs

- In August 2022 the revenue costs associated with the on-going running costs of the hospital were assessed to be the same regardless of site as there was no evidence to suggest that the clinical model delivered from the sites would be different. This remains true in this iteration of the financial and economic evaluation.
- Potential non-recurring staff travel costs were identified that could be different dependent on site chosen. These are highly likely to change as there is no detail currently available over numbers/grades/specialty to be located at the new hospital and is estimated on where our current staff live.

Economic Appraisal

- We contacted experts in 2022 to ascertain whether it was possible to calculate a differential economic benefit. Whilst it was acknowledged that siting a hospital in the zone would have an economic benefit in the area, it was their opinion that it was not possible to determine if this would be different dependent on site given their proximity.

Risks

Several risks were identified through the technical appraisal process that could have a potential financial impact. These remain true.

- At this time these could not be quantified with any degree of accuracy.
- The overarching financial risk is that of estimation based on incomplete data.
- This has been tried to be mitigated through the sensitivity analysis.
- PWC undertook an independent review of the methodologies utilised in the previous iteration of this report and their overall conclusion was that the report and appendices were found to be clear and the underlying methodologies and approaches were found to be robust and well explained. They recognised that there is a potential for cost estimates to change and risks and costs to emerge which were made clear in the report. The structure of this report remains largely unchanged from August 2022.



Section 2: Introduction and Background

Hywel Dda University Health Board (HDdUHB) has submitted a Programme Business Case (PBC) as part of its *A Healthier Mid and West Wales* Strategy to Welsh Government for capital investment, which will include the development of a new urgent and planned care hospital within the zone between and including Narberth in Pembrokeshire and St Clears in Carmarthenshire.

As part of the appraisal process undertaken in August 2022 the shortlisted sites within the zone were reduced from 5 to 3. This process seeks to consider whether the remaining sites can be reduced further at this time.

This report provides an update on the financial and economic appraisal which was presented to the Board in August 2022.

Section 3: Financial Appraisal

A financial appraisal would typically involve the use of financial evaluation techniques to determine which of a range of possible alternatives is preferred.

In terms of site selection for the new Urgent and Planned Care Hospital this report will consider the attributable differential capital and revenue costs to determine a rank of the potential sites with the lowest cost being ranked first.

Capital Costs

It has been assumed that the “build” cost would be the same for each site, therefore differential costs only between each of the shortlisted sites with the assumption that all other costs are consistent across each of the shortlisted sites.

The Health Board have commissioned Gleeds in their capacity as Cost Advisor to compile capital costs for each of the sites in conjunction with WSP, BDP architectural team, Mace and Savills.

The following cost headings have been assessed to show the greatest variation in the capital cost of each of the sites:-

1. **Land Purchase;** Land Valuation for site development and any purchase of land which would be beneficial to site development.
2. **Site Conditions;** Site specific ground conditions, environmental constraints such as site ecology and impact of noise, existing services and cost of diversions and demolition requirements of existing buildings.
3. **Site Topography;** Site terracing requirements including bulk earth movement and retaining walls, impact on site development such as external works and impact of overall site area where an oversized site would require additional landscaping works.
4. **Site Drainage;** On-site and off-site foul drainage such as the length of drainage run and treatment of phosphates, and surface water drainage.
5. **Incoming Services;** Including water and fibre and telecoms supply
6. **Off-site Highway Works;** site access to include main entrance road and secondary access route, active travel route from train station and works required to existing highways such as improvements and safety measures to adjoining roads and town centre traffic calming

The following costing methodology / assumptions have been made in assessing the capital costs of each of the sites:

- Technical appraisals have been interrogated to assess the site condition costs for each site.
- Direct quotations with companies have been sought where possible.
- Where quotations are not available a combination of midrange estimates and general allowances have been utilised.

These have been applied consistently across all options and therefore any additional margin for error in utilising estimates / allowances would apply consistently to each site.

Section 3: Financial Appraisal - continued

The following table summarises the results of the cost analysis.

Table 1

	Whitland, Spring Gardens	Whitland, Tŷ Newydd	St Clears
	£m	£m	£m
Total	23.960	32.291	26.522

Due to the commercial sensitivity detail associated with these costs will be shared in-committee.

The ranking of each option with 1st being the least and 3rd being the most expensive are shown below:-

Table 2

Rank	Site	Difference from Whitland, Spring Gardens £m	Difference from Whitland, Spring Gardens %
1	Whitland, Spring Gardens	0	0
3	Whitland, Tŷ Newydd	8.331	35
2	St Clears	2.562	11

District Valuer valuations have been sought for the land purchase costs of each of the sites.

The cost analysis shows that Whitland, Spring Gardens has the lowest expected additional costs at £23.96m with a £8.3m increase in costs (35%) for the most expensive Whitland, Tŷ Newydd.

Section 3: Financial Appraisal - continued

Whilst assessed by itself a 35% increase would be deemed to be significant, what needs to be considered is that the cost analysis shows the differential costs only.

To illustrate the potential impact of this, the works costs of the new urgent and planned care hospital in the AHMWW PBC, updated to current values, is approximately £556m.

Some of the costs included within the cost analysis in table 1 would be included in that cost, however as it is not possible to distinguish which of these costs are included, £556m will be utilised for illustrative purposes.

Adding the cost analysis to the works costs of the New Urgent and Planned Care Hospital changes the percentage increase as follows:-

Table 3

	Whitland, Spring Gardens £m	Whitland, Tŷ Newydd £m	St Clears £m
Costs Table 1	23.96	32.29	26.52
Works Costs	556.00	556.00	556.00
Total	579.96	588.29	582.52
% Increase (lowest cost)	0.00%	1.44%	0.44%

This demonstrates that when considered within the overall works costs the percentage difference between the sites is less than 1.5%.

Whilst the impact of inflation could be significant, we have assumed that each site would be available for construction at the same time and the cost of inflation would be consistent for all sites. No increase for inflation has therefore been made to these costs.

It should be noted that there remains the potential for significant variation in the estimated costs as the Health Board progresses to OBC stage.

Environmental and Ecological Costs

The capital costs have considered the wider environmental and ecological costs of each site where possible.

Decarbonisation

It has not been possible to calculate the different decarbonisation impacts for each site.

Section 3: Financial Appraisal - continued

Revenue Costs

It was previously assessed as to whether there would be any significant variation in revenue costs between each of the shortlisted sites. As the clinical model is going to be predominantly the same irrelevant of site, at this stage it is difficult to determine any significant variation. The following headings were considered in detail:

Table 4

Revenue Cost Heading	Cost Variation (Y/N)	Rationale
Staff Pay Costs	N	Current assumption is that the same clinical services would be located at each of the shortlisted sites
Other Staff Costs e.g. travel	Y	There could be temporary staff relocation expenses which would vary against each of the shortlisted sites.
Premises Costs	N	Current assumption there would be no great variation in building size

It was assumed that all other revenue costs such as digital, maintenance contracts and consumables would be the same across the shortlisted sites.

Analysis of other staff costs (temporary staff relocation mileage expenses)

The analysis undertaken in August 2022 assumed that staff would be eligible to reclaim excess mileage for four years under existing terms and conditions of service. There is a risk that this could change in the future which would have an impact on the potential cost.

The analysis undertaken showed the potential financial impact if staff who have Glangwili and Withybush stated as their work base would be required to work in the new Hospital. Not all of these staff would be expected to change work base as they could be working remotely or may move to other community based settings, therefore a notional percentage of forty, fifty and sixty has been applied to the total potential mileage.

The analysis showed the estimated costs over a four period - this has not been updated as no new information is available regarding services/staff numbers in the new configuration.

Section 3: Financial Appraisal - continued

Table 5

% Staff reclaiming mileage	Whitland, Spring Gardens £m	Whitland, Tŷ Newydd £m	St Clears £m
40	7.61	7.63	6.78
50	9.51	9.54	8.48
60	11.41	11.45	10.17

This demonstrates that based on the assumptions made there could be a marginal cost difference between the St Clears and Whitland sites.

On this basis it can be concluded that at this stage there are no material revenue cost differences between each of the sites.

The above analysis would be ranked in the following order with Rank 1 being the lowest cost:-

Table 6

Rank	Site
2	Whitland, Spring Gardens
3	Whitland, Tŷ Newydd
1	St Clears

As the Business Case progresses through to the next stages greater granularity will be known in terms of the proposed clinical model across the Health board which may influence the revenue costs dependent on which site is selected.

Section 4: Risk and Sensitivity Analysis

Risk Analysis

A summary of the key financial risk is noted below.

Table 7

Risk	Mitigation
High degree of estimation leading to inaccuracies in costings	Independent review undertaken by PWC to verify the reasonableness of the assumptions made

The results of the Financial and Economic Land appraisal should therefore be viewed in this light.

The technical appraisal has identified some risks which could have a financial impact, however quantification is not possible at this stage.

Section 4: Risk and Sensitivity Analysis - Continued

Sensitivity Analysis

A sensitivity analysis has been applied to the results in table 1 to examine the impact of potential movements in capital costs. The below demonstrates the extent that the costs of each site must reduce to become equivalent to the most cost effective option when compared with an increase in the costs of the cheapest site.

Table 8

Whitland, Spring Gardens	Whitland, Tŷ Newydd	St Clears
% difference applied to original capital costs		
+2%	(24.3)%	(7.9)%
+10%	(18.4)%	(0.7)%
+20%	(11.0)%	No reduction required
+30%	(3.6)%	No reduction required
+40%	No reduction required	No reduction required

The above demonstrates the extent that the capital costs are sensitive to potential changes and how the ranking of options could be influenced by changes in the capital costs.

As can be shown above the difference in the costs of St Clears and Whitland, Spring Gardens is smaller than Whitland, Tŷ Newydd, with only 2% increase in costs to Whitland, Spring Gardens required and a corresponding reduction of 7.9% for St Clears for both to be comparable.

A 2% increase in the costs of Whitland, Spring Gardens would require a corresponding 24.3% reduction in the costs for Whitland, Tŷ Newydd to be comparable.

Section 5: Economic Appraisal

An economic appraisal can be utilised as a key tool for assessing the value for money of an investment decision.

It would typically look at direct and indirect capital and revenue costs, direct and indirect public sector benefits which include quantifiable and qualitative benefits and wider benefits to UK society as a whole.

Risk costs would also be included.

An economic appraisal would seek to answer which option provides the best balance of cost, benefits and risk.

As was acknowledged last year having been tested at the time with WG etc¹ there is no significant economic difference between the shortlisted sites as they are located within a very small geographical zone. Also as the current assumption is that the clinical model would be the same for each of the sites the benefits and risks would be the equivalent for each option.

Following the advice received from experts it was concluded that it is not possible to demonstrate a differential economic impact between each of the sites.

¹ Extract from August 2022 - Welsh Government acknowledged that it would be difficult to differentiate any economical impacts between the sites and have confirmed that there is no requirement to complete a Comprehensive Investment Appraisal Model nor to calculate a Net Present Cost for each site at this stage. Health and Care Economics

Cymru who are an all-Wales collaboration of health economics experts, concluded that there is unlikely to be a differential economic benefit to the community in terms of the alternative sites compared with the overall impact of siting a hospital within the selected zone. The Foundational Economy Department within Welsh Government have also concluded that it is not possible to identify and significant differences in economic impact of the different sites, due to their close proximity and similar average wages across the two counties. 13

Section 7: Conclusion

The capital appraisal demonstrated a variation in capital costs of £8m between the shortlisted sites.

The results of the revenue appraisal suggested that there is a difference of £1m over a four year period if 50% of staff were to relocate.

The ranking of each shortlisted site in terms of the capital and revenue cost analysis is shown below.

Table 9

Site	Rank Capital	Rank Revenue
Whitland, Spring Gardens	1	2
Whitland, Tŷ Newydd	3	3
St Clears	2	1

The table above shows the ranking applied based on a crude analysis of lowest to highest costs.

There is a difference between the capital costs associated with the land selection for the sites. However, when these costs are considered with the potential total cost of the New Urgent and Planned Care Hospital the differences are much less significant and are not a strong enough indicator to favour one site over the other.

Similarly, the revenue cost analysis suggested that there is not enough of a variation at this stage to affect site selection.

There also remains a high level of uncertainty over these cost estimates at this stage.

The small geographical area between the shortlisted sites means that there is insufficient evidence available to differentiate the relative economic benefits of each of the sites.

The financial and economic appraisal is one part of the land selection process and these results should be considered with those of the other land selection analyses.