



ELEMENTAL BREAKDOWN COST PLAN

ELEMENTAL COST BREAKDOWN AND REPORT
FOR THE FFORWM ON BEHALF OF UWTSD

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ACBA 5003 | PRESENTING TO DEBROAH HUGHES

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Introduction

An elemental cost breakdown has been produced for the planned construction of Y Fforwm on behalf of UWTSD. The building is set in Swansea Marina, within proximity of the existing campus building. Detailing from the drawings provide suggest a large building, set over 3 storeys' to include learning facilities, a library, staff rooms and multiple internal workspaces. Foundation drawings provided showcase reinforced concrete piling caps and slab foundations with columns throughout the building. The ground floor consists of 6 learning studios, 2 additional work rooms, as well as a vending and copying areas. All rooms lead off from a main reception with additional space for seating and exhibitions. Both a stairway and lifts give access to the first floor. The first floor includes multiple learning commons and 5 separated group work rooms. The second and final floor of the proposed building houses the main library, dedicated reading areas and computer workstations. This floor adds a further 6 separate rooms and 2 quiet rooms. Externally, the building is surrounded by curtain walling and brick walls with a metal sheeting roof made of RoofDek D60 (1.2mm steel). The overall specification of the project is of high standard throughout, offering a creative work and learning space for the staff and students. Schedules have been provided for internal walls, doors, and windows and in detail sections throughout the drawings. However, some assumptions have been made for the purpose of the elemental breakdown cost. As this is an elemental cost plan, not all section within the document have been priced and fully accounted for. Details on any assumptions made or any missing rates can be found using the key and list below.

Key

Please see key below in reference to the elemental cost breakdown sheet. Highlighted items refer to different assumptions, missing information or require more detailed measurement and/or design information.

	Key	
	No Assumption Made	Assumption Made
Information missing		
Additional Measurements/ Information Required		
Not on plan/Query Sent		
Assumption Made		

Assumptions

Assumptions have been made throughout the elemental cost plan to provide a more accurate final amount. Below is the main assumption made according to the above key on sections 0 – 9.

0 Facilitating Works

Toxic/Hazardous materials, contaminated land & major demolition works 0 – 0.2

Information and detailed measurement are missing on the plans provided to produce any reasonable costs on the facilitating works. Neither amounts nor information to be measured is available to carry out this section of the cost plan. No assumptions were made on this section due to the varying outcomes of differing ground conditions. Items such as toxic or hazardous material or works carried out on contaminated land can be costly. If these works are not required on the project, they can hugely influence and overestimate the final cost. In this instance the rates have not been provided. If this work is required on the project, please provide detailed information on any removal, demolition or mediation required. Additional information on location or m² of contaminated land would assist in a more accurate rate and total.

1 Substructure

Foundations 1.1

Assumptions have been made on the excavation of the ground conditions and pits. A description has been provided of the chosen type and works to provide a rate. Additionally, the rate provided for the beam ring surrounding the foundations includes an assumption on the reinforcement amount of 270 kg/m³. This was to allow for a rate to be included in the substructure section of the cost plan. The depth of the piles has been assumed to be 18m. If this information is incorrect, please advise. This rate also includes the plant costs.

2 Superstructure

Frame 2.1

In addition to the framework rates an allowance for miscellaneous works and protection for the columns has been provided. This information was not available on the drawings provided therefor an assumption and estimation was made for the purpose of the cost plan. If any extra

works and or services are required for protection or separate works of this section sufficient information would need to be provided for a more in depth, accurate rate and sub-total. This section does not include and works or rates for the lift pit.

Upper Floors 2.2

The drawings and plans confirm the concrete structure and suspended floors. An assumption has been made on the 75mm thick screed and no finishes have been included in the final rate. Overall span and loading weight have also been assumed for the purpose of the cost plan. This information will need to be presented for a final bill of quantities. The lift pit m² has been removed from the m² used for the final sub-total.

Roof 2.3

The plan for the roof structure indicates that metal decking has been used, including the chosen material and thickness. To complete the cost plan, final details such as the insulation, layering and U-value have been assumed. Information regarding rainwater goods, trims and flashings are not on the plans. A query would be sent to provide this rate for a bill of quantities. In this instance an assumption has been made for allowances on these items. To calculate the roof size including the soffits an assumption has been made at 1.65m wide.

Stairs & Ramps 2.4

Material grade and finish of the stairs was not provided on the final plans therefore and assumption has been made. Following the spec of the building a high-quality finish with stainless steel and glass balustrades has been chosen. If the final design differs from this, then an updated rate will need to be provided.

External Walls 2.5

The external façade comprises of a mix of facing brick walls and curtain walling. A rate has been chosen based off creating a bespoke system of a vertical aluminium system. Information has been provided on material and colour and has been incorporated into the rate. A provisional sum has been provided for the louvre detailing surrounding the external of the building.

Windows 2.6

Plans provided only show a front and side elevation view. An assumption has been made that the window placements are identical on the rear and opposite elevation for the unit amounts.

External Doors 2.6

Sizing and placement information is clearly visible on plan of the revolving doors. The only assumptions made are the specifications on the chosen door type. This was made to allow for a rate to be provided and following the high spec throughout the project a high-quality operating system was chosen.

Internal Walls 2.7

Acoustic rating and fire rating detailing has been assumed for the internal walls. This information may change the final cost when finalised for a bill of quantities.

Internal Doors 2.8

Standard and spec of internal doors has been assumed for this exercise. Sizing and amounts have been provided and used against the chosen rate to allow for a provisional sum.

3 Internal Finishes

Floor Finishes 3.2

No information has been given on any floor finishes throughout the building. Measurements can be made but further details will need to be provided. No assumption has been made on this section as this is a elemental cost plan. For a bill of quantity this information will need to be provided or an assumption would be made.

Ceiling Finishes 3.3

The finish spec of the ceilings isn't fully known from the drawings. A provisional sum on suspended plank systems has been provided to offer some guidance on cost. Ceiling finish is

measured in m² following NRM1 however this instance a no. of units has been used for the purpose of an elemental cost plan.

4 Fittings and Furnishings

General fittings, furnishings and equipment 4.1

An allowance and provisional sum has been made for fittings and furnishings. Following the specification of the building this allowance has been made to appropriately match high quality items and equipment.

5 Services

Disposal Installations, Water Installations & Heat Source 5.3 – 5.5

Rates have been provided for the above sections however missing information from plans and drawings has not allowed for an accurate cost to be made. If the information is available, then the rates will change for this addition to be made for a bill of quantities.

Lift and Conveyor Installations 5.10

The exact specification of the lift system is not detailed on the drawings therefor an assumption has been made on size, capacity and finishes.

Specialist Installations 5.13

A provisional sum has been provided for the PV solar panels. An estimated number of panels from the elevation drawings was used to calculate this sum. More detail on exact panel amounts and/or sizing will be required to fully estimate this cost.

8 External Works

No cost has been calculated for this section. The information and drawings provided do not have sufficient detailing to create an estimated cost. Please provide more detail on any

external works such as landscaping, road works, paving and drainage. External services information will also need to be finalised to provide a full bill of quantities.

9 Main Contractors Preliminaries

For the cost plan a 10% provision has been provided for the main contractors preliminaries & OHP. This has a large impact on the final cost plan. If this amount does not need to be provided or needs to be altered, please advise.

Cost Plan Total

The final elemental cost amount is **£3,574,925.06**

£2,068.82pm²

This total includes all possible rates available from the drawings provided in addition to the above assumptions. Any discrepancies in finish or quality will need to be finalised prior to bill of quantities. Final amounts on fittings and furnishings will also need to be provided. Any provisional sums included in the elemental cost plan will be updated and re submitted following any new information.