

CIRCULATED AT MEETING  
 AGENDA ITEM 4a) YORK DISTRICT HOSPITAL

Kier Construction - Northern

Breem Very Good

Contract No. Y1791

Cost Estimate

Date: 25/07/2016

Subcontractor / Supplier: Various

Kier Construction - Northern

Cost Implications:

£134,724.26

Item	Description	Qty	Unit	Rate	Amount	Kier Fee%	M&E Fee %	Totals
	<b>Breem Very Good</b>							
	Fess as per attached breakdown	1	Item	£ 111,241.44	111,241.44	8,157.33		
	BRE Registration Fee	1	Item	£ 195.00	195.00	14.30		
	Formal DS Assessment (2no. Meetings & 1 no. Formal CS Assessment (1 no. site visit & 1 no. meeting & 1 no submission)	1	Item	£ 6,150.00	6,150.00	450.98		
	<u>Kier time to manage the design and process in accordance with Breem</u>							
	- Design Manager 4 weeks @ 70% collating information for submission	4	weeks	£ 942.11	£ 3,768.45	276.34		
<b>Totals</b>						<b>125,519.89</b>		<b>125,519.89</b>
Kier P21+ fee						7.333%	19.14%	
Fee Sub-Total						9,204.37		<b>9,204.37</b>
<b>Total Estimated Cost (excluding VAT)</b>								<b>134,724.26</b>

Programme Effects:

Clarifications:

- 1
- 2
- 3
- 4

Attachments:



**Kier Construction - Northern**

**Breem Good**

**Contract No.** Y1791

**Cost Estimate**

**Date:** 25/07/2016

**Subcontractor / Supplier:** Various

**Kier Construction - Northern**

**Cost Implications:**

**£91,786.60**

Item	Description	Qty	Unit	Rate	Amount	Kier Fee%	M&E Fee %	Totals
	<b>Breem Good</b>							
	Fess as per attached breakdown	1	Item	£ 72,313.98	72,313.98	5,302.78		
	BRE Registration Fee	1	Item	£ 195.00	195.00	14.30		
	Formal DS Assessment (2no. Meetings & 1 no. Formal CS Assessment (1 no. site visit & 1 no. meeting & 1 no submission)	1	Item	£ 6,150.00	6,150.00	450.98		
	<u>Kier time to manage the design and process in accordance with Breem</u>							
	- Design Manager 4 weeks @ 50% collating information for submission	4	weeks	£ 672.94	£ 2,691.75	197.39		
	<b>Totals</b>					<b>85,515.73</b>		<b>85,515.73</b>
						<b>Kier P21+ fee</b>	<b>7.333%</b>	<b>19.14%</b>
						<b>Fee Sub-Total</b>	<b>6,270.87</b>	<b>6,270.87</b>
						<b>Total Estimated Cost (excluding VAT)</b>		<b>91,786.60</b>

**Programme Effects:**

**Clarifications:**

- 1
- 2
- 3
- 4

**Attachments:**



Simple Calc v01

York Endoscopy Unit

Legend

Pre-requisite Minimum standards to meet credit

Credit ID	Title	Requirements	Available	Achieved
<b>Management</b>				
Man 01 - Project Design and Brief	Stakeholder Consultation: Project Delivery (1 - 3)	Define roles and responsibilities for the project delivery stakeholders for each key phase prior to RIBA Stage 2. Includes consideration of: end user requirements, construction constraints, design strategy, budget, documentation, manageability of the proposals, end-user documentation, commissioning, training and aftercare support.	1	
	Stakeholder Consultation: Third party (4 - 7)	Consultation with relevant stakeholders, provision of feedback to consultees and integration of feedback into the scheme design. NB Consultation needs to be undertaken by an independent third party using DQI or AEDET for example.	1	
	Sustainability Champion: Design (8 - 10)	Appointment of BREEM AP from RIBA Stage 1 to advise on target setting.	1	
	Sustainability Champion: Monitoring Progress (11 - 12)	Criteria 8 - 10 are met. Monitoring of the BREEM process during design stages by the BREEM AP, attendance at key meetings and production of reports.	1	
Man 02 - Life Cycle Cost and Service Life Planning	Elemental LCC (1 - 2)	Compliant elemental Life Cycle costing at RIBA Stage 2 and design options appraisal in accordance with PD156865:2008 on the basic structure and envelope based on the life expectancy of the refurbished building, e.g. 20, 30, 50-years. A fabric and servicing strategy outlining services and component options over a 15-year period is in the form of an elemental LCC plan.	2	
	Component Level LCC (3 - 4)	LCC has been developed to RIBA Stage 4 in line with PD 156865:2008 and covers analysis at the component level (envelope, building services, finishes, external spaces), where present and the preferred option identified.	1	
	Capital Cost reporting (5)	Report the capital cost of the building (Exim2) via the BREEM Assessment and reporting tool.	1	
Man 03 - Responsible Construction Practices	<b>Pre-requisite</b>	Timber sourced in accordance with UK Government Timber Procurement Guidelines		
	Environmental Management (1 - 2)	Principal Contractor operates under an EMS (ISO14001 or equivalent) Adopts best practice pollution prevention measures, in accordance with PPG 6: Working at Construction and Demolition Sites.	1	
	Sustainability Champion (3 - 5)	Appointment of a Sustainability Champion to monitor the project during construction. Requirement will be site-based, regularly monitor and have authority to require short conings in compliance to be addressed.	1	
	Considerate Construction (6) <i>One credit Mandatory for Excellent</i>	CCS score of between 25 - 34 CCS score of >35	2	
	Monitoring construction site impacts (7 - 16)	Responsibility assigned to individual to monitor, record and report energy consumption and CO2 emissions and water consumption (using BRE reporting tool). Responsibility assigned to individual to monitor, record and report on transport data attributable to material delivery and waste removal to / from site.	1	
Man 04 - Commissioning and Handover	Commissioning: Testing schedule and responsibilities (1 - 4)	Commissioning in accordance with Building Regulations, CIBSE / BSRIA guides, inclusion in construction programme and appointment of commissioning monitor.	1	
	Commissioning: Building Services (5)	Criteria 1 - 4 are achieved Appointment of specialist manager for complex building services to provide reviews, design input and management activities.	1	
	Testing and Inspection: Building Fabric (6 - 8)	Undertake a thermographic survey post construction and rectify any defects.	1	
	Handover (9 - 10) <i>(Item 9 - BUS - Mandatory for Excellent)</i>	Compliant Building User guide for FM and general building users (stand alone and non-technical), AND, Develop a training schedule for building occupiers / managers.	1	
Man 05 - Aftercare	Aftercare Support (1 - 2)	Monitoring water and energy consumption for the first 12-month of occupation AND, Provision of aftercare support in the form of meetings, training, and longer term support for at least 12-months, etc.	1	
	Seasonal Commissioning (3) <i>(Mandatory for Excellent)</i>	Seasonal commissioning for the first 12-months under full and part load and where relevant, high and low occupancy, interviews with building occupants and re-commissioning, where required.	1	
	Post Occupancy Evaluation (4 - 5)	Client commits to carry out a Post Occupancy Evaluation (POE) by an independent 3rd party 1 year after occupation to gain building performance feedback. Publicly disseminate information on the performance of the building, through the client website, or similar, to share good practice and lessons learnt.	1	
<b>Management</b>			21	
<b>Management Score Totals:</b>			19.0	
<b>EACH CREDIT WORTH</b>			0.57	
<b>Health and Wellbeing</b>				
Hea 01 - Visual Comfort	Glare Control (1 - 2)	Provision of glare control to relevant areas, which avoids increasing lighting energy consumption, i.e. Building design (low eaves), external shading (brise sole), internal shading (blinds).	1	
	Daylighting (3)	2% average daylight factor in 80% of staff and public areas AND uniformity ratio of at least 0.3 or view of sky AND room depth criterion are met.	2	
		3% average daylight factor in 80% of occupied patient areas AND uniformity ratio of at least 0.3 or view of sky AND room depth criterion are met.		
	View Out (4 - 6)	Achievement of view-out criteria in 95% of relevant building areas (typically workstations within 7m of an external window and the window area is >20% of the surrounding wall area)	1	
Lighting Levels (7 - 10) and Zoning (11 - 13)	All fluorescent and compact fluorescent lighting have high frequency ballasts. Internal lighting levels in accordance with SLL Code for Lighting 2012 And CIBSE LG7 (Sections 3.3, 4.6, 4.7, 4.8 and 4.) All external lighting is in accordance with BS5489-1 (lighting of roads and amenity spaces) and BS EN 12664-2 (lighting of outdoor workspaces) where relevant Suitable local control and zoning of lighting is provided	1		
Minimising Sources of Air Pollution: Indoor Air Quality Plan (1)	Production of an IAQP, which considers sources, how to remove, dilute and control them, procedures for flush out, 3rd party testing and maintaining quality	1		

Cost to achieve Breem Good

Cost to achieve Breem Very Good

TARGET	APPROX COST	COMMENT
1	£ -	
1	£ -	
1	TBA	
0	Excluded	
0	Excluded	
1	Trust Cost	Achieving this credit will involve a Trust Cost
1	£ -	
0	Excluded	
1	£ 2,000.00	CCS - ASSESSOR FEE £2000
1	£ 4,592.64	SAY 2HRS PER WEEK X 64 WEEKS £35.80
1	£ 4,592.64	SAY 2HRS PER WEEK X 64 WEEKS £35.80
1	£ 1,088.78	3 DAYS X £48.39 PLANNER
1	£ 5,897.25	SAY 3 WEEKS X 37 SHRS X Building Services DM (£52.42)
0	Excluded	
1	£ 4,000.00	IB Project Management £4000
1	£ 6,579.00	Kier have an aftercare department that is project costed. Say 3 weeks full time x 37.5 x £58.48
1	£ 4,717.80	1 day per moth x 12 months Building Services DM (£52.42). Achieving this credit will also involve a Trust Cost
1	Trust Cost	Achieving this credit will involve a Trust Cost
<b>14</b>	<b>£ 33,460.11</b>	

TARGET	APPROX COST	COMMENT
1	£ -	
1	£ -	
1	TBA	
1	£ 475.00	As per WYG fee
0	Excluded	
0	Excluded	
1	Trust Cost	Achieving this credit will involve a Trust Cost
1	£ -	
1	£ 3,712.13	SAY 1 WEEKS X 37 SHRS X £98.99
2	£ 2,500.00	CCS - ASSESSOR FEE £2500
1	£ 4,592.64	SAY 2HRS PER WEEK X 64 WEEKS £35.80
1	£ 4,592.64	SAY 2HRS PER WEEK X 64 WEEKS £35.80
1	£ 1,088.78	3 DAYS X £48.39 PLANNER
1	£ 5,897.25	SAY 3 WEEKS X 37 SHRS X Building Services DM (£52.42)
1	£ 2,950.00	HRS air testing £590 per visit x 5 visits incl pre-assessment. Thermography assume same cost.
1	£ 4,000.00	IB Project Management £4000
1	£ 6,579.00	Kier have an aftercare department that is project costed. Say 3 weeks full time x 37.5 x £58.48
1	£ 4,717.80	1 day per moth x 12 months Building Services DM (£52.42). Achieving this credit will also involve a Trust Cost
1	Trust Cost	Achieving this credit will involve a Trust Cost
<b>18</b>	<b>£ 41,105.23</b>	

Hea 02 - Indoor Air Quality	Minimising Sources of Air Pollution: Ventilation (2 - 5)	Minimisation of air-recirculation by considering positions and distances of air intakes/extracts, OR, ensuring the design of building air intakes and extracts is compliant to BS 13779:2007. HVAC systems have suitable filters compliant to BS 13779:2007. Provision of CO2 sensors in areas of unpredictable occupancy.	1	
	Minimising Sources of Air Pollution: VOCs (6 - 7)	Specification of decorative finishes and fitting in accordance with BS VOC requirements.	1	
	Minimising Sources of Air Pollution: VOCs Post Construction testing (8 - 12)	Post completion, pre-occupancy VOC testing.	1	
Adaptability: Potential for Natural Ventilation (13 - 14)				1
Hea 04 - Thermal Comfort	Thermal Modelling (1 - 4)	Full dynamic thermal modelling carried out in accordance with CIBSE AM11, provision of TDS data and thermal comfort levels achieved in accordance with HTH 03-01, Appendix 2.	1	
	Adaptability (5 - 8)	Criteria 1 - 4 are achieved Where the thermal model demonstrates maintenance of CIBSE thermal comfort levels under project climate change environments	1	
	Thermal Zoning and Controls (9 - 11)	Criteria 1 - 4 are achieved Production of a temperature control strategy informed by the thermal model and demonstration of thermal control and zoning provisions	1	
Hea 05 - Acoustic Performance	Sound Insulation (1)	Achieve the airborne sound insulation performance standards set out in Section 2 of HTH 08-01: Acoustics, 2013 and there is a programme of pre-completion acoustic testing. Where standards are not achieved, remedial measures are undertaken.		
	Internal Ambient Noise Levels (1)	The indoor ambient noise requirements for noise intrusion from external sources in Table 1 of HTH 08-01: Acoustics, 2013 are not exceeded and there is a programme of pre-completion acoustic testing. Where standards are not achieved, remedial measures are undertaken	3	
	Reverberation (1)	Achieve the requirements relating to sound absorption set out in Section 2 of HTH 08-01: Acoustics and there is a programme of pre-completion acoustic testing. Where standards are not achieved, remedial measures are undertaken		
Hea 06 - Safety and Security	Safe Access (1 - 10)	Provision of safe pedestrian footpaths and cycle routes compliant to LTN 2/08 or Sustrans, AND, Ensuring that delivery areas are not accessed through parking areas and/or cross or share pedestrian routes and are designed for ease of manoeuvring.	1	
	Site Security (11 - 13)	A Suitably Qualified Security Specialist (SQSS) undertakes a Security Needs Assessment (SNA) no later than RIBA Stage 2. Recommendations are provided by the SQSS and integrated into the scheme design.	1	
Health and Wellbeing Totals:			18	
% Health and Wellbeing Score Totals:			15.0	
EACH CREDIT WORTH			0.83	
<b>Energy</b>				
ENE 01 - REDUCTION OF LCC EMISSIONS (Minimum of Six Credits for Excellent)				
Up to 12 credits available based on sliding scale of the EPC <sub>10</sub> (Energy performance ratio)			12	
Ene 02 - Energy Monitoring	Submetering of major energy consuming systems (1 - 4) (Mandatory for Very Good)	BEMS or pulsed output sub-meters for space heating, domestic hot water, lighting and small power by floor plate, cooling, major fans, lifts and any other relevant major uses.	1	
	Submetering of areas (3)	BEMS or pulsed output sub-meters to departments / areas / tenancy	1	
Ene 03 - External Lighting	Provision of energy efficient luminaires, with an AVERAGE efficacy not less than 60 lumens/lumens per circuit watt, controlled for daylighting via photocells or timers	1		
Ene 04 - Low Carbon Design	Passive design: Analysis (1 - 3)	Achieving required thermal comfort levels in Hea 04 Undertaking an analysis at RIBA Stage 2 concerning the integration of passive design solutions to reduce heating, cooling, ventilation and lighting loads.	1	
	Passive design - Free cooling (4 - 6)	Criteria 1 - 3 are achieved Where free cooling strategies are utilised within the development.	1	
	L2C Feasibility Study (7 - 8)	Compliant L2C study considering operational carbon savings, with recommendations implemented.	1	
Ene 06 - Energy Efficient Transportation Systems	Energy consumption	Undertake a passenger transport demand analysis to determine the appropriate size / no. of lifts and undertaken an energy analysis of two lifts, specifying that which is most energy efficient	1	
	Energy Efficient Features	Ensure the specified lift incorporates additional energy efficiency features	2	
Ene 08 - Energy Efficient Equipment	Implementing measures to minimise the energy consumption of areas / plant responsible for the largest unregulated energy demand within the development.	2		
Energy Totals:			23	
% Energy Score Totals:			15.0	
EACH CREDIT WORTH			0.65	
<b>Transport</b>				
Tra 01 - Public Transport Accessibility	An assessment of the Accessibility Index for the development based on distance to transport nodes and service frequency	5		
Tra 02 - Proximity to Amenities	Proximity (within 500m) of the development to four relevant amenities (two of which must be core amenities, such as a grocery store, cash machine or leisure / sports facility).	1		
Tra 03 - Cyclist Facilities	Cycle Storage	Provision of cycle storage facilities in line with the BREEM requirements	1	
	Cyclist Facilities	Provision of two additional cyclist facilities (incl. Changing rooms and lockers, showers and/or drying spaces.	1	
Tra 04 - Maximum Car Parking Capacity (1)	Minimising the provision of car parking facilities for building users	1		
Tra 05 - Travel Plan (1 - 4)	Production of a site-specific transport assessment and travel plan developed at feasibility and design stages to assess the surrounding environment and sustainable transport options and implement the recommendations within the development.	1		
Transport Totals:			10	
% Transport Score Totals:			9	
EACH CREDIT WORTH			0.90	
<b>Water</b>				
Wat 01 - Water Consumption (1 - 6)		Up to five credits for the provision of water efficient fittings to produce water consumption improvements of 12.5%, 25%, 40%, 50% or 55% <i>One Credit Mandatory for Good rating and above</i>	5	
Wat 02 - Water Monitoring	Pre-requisite: Water meters (1-4)	Provision of pulsed water meters connected to the BMS on the main water supply to the building.		
	Water sub-meters (2 - 4)	Provision of water submeters to areas or plant consuming >10% of the predicted water demand of the building	1	
Wat 03 - Leak Detection	Major Leak Detection (1)	Provision of a water leak detection system capable of detecting leaks both within the building and between the building and the site boundary	1	
	Sanitary Supply Shut-off (2)	Provision of a sanitary supply shut-off system to WC areas	1	

0	Excluded			
1	£ 250.00			
0	Excluded			
0	Excluded			
1	£ -			
0	Excluded			
0	Excluded			
0	Excluded			
0	Excluded			
N/A	Excluded			
2	£ 3,000.00	Architect fee to incorporate SQSS comments in to the design. <b>Achieving this credit will also involve a Trust Cost</b>		
7	£ 4,595.88			
4	£ 2,500.00	Allowance for potential alterations to model to satisfy Bream Requirements		
1	£ 10,000.00	Estimated cost of £10,000 for the additional pulsed meters		
0	Excluded			
1	£ -			
0	Excluded			
0	Excluded			
1	£ 1,500.00	Consultant fee to produce study		
1	£ 5,000.00	Additional consultant fee		
0	Excluded			
0	Excluded			
8	£ 19,000.00			
2	£ -			
1	£ -			
0	Excluded			
0	Excluded			
0	Excluded			
1	Trust Cost	Achieving this credit will involve a Trust Cost		
4	£ -			
7	£ -			
1	£ -			
1	£ -			
1	£ 15,000.00	Allowance for linking meters to BMS		
0	Excluded			

1	£ 1,965.75	SAY 1 WEEKS X 37 SHRS X BUILDING SERVICES DESIGN MANAGER £52.42	
1	£ 250.00		
1	£ 3,355.13	Architect for 1 WEEK X 37 SHRS@ £89.47	
0	Excluded		
1	£ -		
1	£ -		
1	£ -		
2	£ 11,800.00	Acoustic Consultant Fee	
N/A	Excluded		
2	£ 3,000.00	Architect fee to incorporate SQSS comments in to the design. <b>Achieving this credit will also involve a Trust Cost</b>	
13	£ 21,716.75		
6	£ 3,333.33	Allowance for potential alterations to model to satisfy Bream Requirements	
1	£ 10,000.00	Estimated cost of £10,000 for the additional pulsed meters	
1	£ 2,500.00	Estimated cost of £2,500 for the additional pulsed meters	
1	£ -		
0	Excluded		
0	Excluded		
1	£ 1,500.00	Consultant fee to produce study	
1	£ 5,000.00	Additional consultant fee	
2	£ 2,500.00		
2	Trust Cost	Achieving this credit will involve a Trust Cost	
13	£ 24,633.33		
2	£ -		
1	£ -		
1	Trust Cost	Achieving this credit will involve a Trust Cost	
1	Trust Cost	Achieving this credit will involve a Trust Cost	
1	£ -		
1	Trust Cost	Achieving this credit will involve a Trust Cost	
1	£ 750.00		



Man 05 - Aftercare	Monitoring of energy and water consumption for 3-years post construction, set targets and feedback lessons learnt.	1	
Hea 01 - Visual Comfort	Point daylight factor of at least 2% or more in at least 50% of the sale Floor Area.	1	
Hea 02 - Indoor Air Quality	Where all seven product categories meet the testing and emission level requirements and formaldehyde levels are found to be in accordance with approved testing standards	1	
	Where all seven product categories meet the testing and emission level requirements and formaldehyde levels are found to be less than or equal to 0.01mg/m3	1	
Ene 01 - Reduction of CO2 Emissions	Up to five credits, the first of which is for being zero carbon in terms of it's operational energy demand.	5	
Wat 01 - Water Consumption	The provision of water efficient fittings to produce water consumption improvements of 65%.	1	
Mat 01 - Life Cycle Impacts	Achieving a min 2 Ecopoints above the number of points required to obtain the maximum number of credits or demonstrate additional improvements based on the IMPACT tool	3	
Mat 03 - Responsible Sourcing of Materials	Sourcing >95% of materials per building element from responsible sources	1	
Wst 01 - Construction Waste Management	Non-hazardous construction waste Achieving a non-hazardous waste generation benchmark of <1.9 tonnes/100m2 GFA AND, achieving landfill diversion target of 85% (volume) or 90% (weight for construction waste and 85% and 95% respectively for demolition waste.	1	
Wst 02 - Recycled Aggregates	Where the total amount of recycled / secondary aggregate for high grade uses is 35% by weight or volume of the total for high grade aggregate uses.	1	
Wst 05 - Adaptation to Climate Change (1)	Achievement of the standard credit requirements, plus: Hea 04, Ene 01 (at least 5no. Credits), Ene 04, Wat 01 (3 credits), Mat 05 (criterion 2), Pol 03 (max of one credit for flood risk and 2 credits for surface water run-off).	1	
Innovation Totals:		18	
% Innovation Score Totals:		10	
<b>OVERALL TOTALS:</b>			
<b>OVERALL SCORE TOTALS:</b>			

No more than 10 credits under the innovation section are permitted.

1	Trust Cost	Achieving this credit will involve a Trust Cost	1	Trust Cost	Achieving this credit will involve a Trust Cost
0	Excluded		0	Excluded	
0	Excluded		0	Excluded	
0	Excluded		0	Excluded	
0	Excluded		0	Excluded	
0	Excluded		0	Excluded	
0	Excluded		0	Excluded	
0	Excluded		0	Excluded	
0	Excluded		0	Excluded	
0	Excluded		0	Excluded	
0	Excluded		0	Excluded	
0	Excluded		0	Excluded	
0	Excluded		0	Excluded	
1	£ -		2	£ -	
<b>56</b>	<b>£ 73,313.98</b>		<b>89</b>	<b>£ 111,241.44</b>	