

**Total**

Review	(All)
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Count of Score											
WS#	Keyword	Title	Mitigation	Progress	Owner	Control	Probability	Impact	Score	Status	Total
04 Decant - all		0 Unforeseen Changes in Law - Health and Safety. Potential changes in legislation or new methods. (4.17)	No mitigation possible		0 RSB	Decant Delivery Group	1	1	1	Open	1
		Incoming Trust-supplied services (not Stats) are not completed in line with the programme. Includes BMS, IT & Security final connection points (4.44)	Good programme management	assumptions clear in phase 4 contract programme	RSB	Decant Delivery Group	1	1	1	Open	1
		Failure to implement agreed decant plan	Regular update to 3T's Programme Board. Regular meeting to update operations team, Executives and Chief's. Ongoing discussions with individual divisions and services.	Operational staff now engaged and a range of solutions are being worked through for the "orphans" although some double decating will now be necessary. Site Logistics Group set up to manage these issues.	DP	DDG	3	5	15	Open	1
		Lack of infrastructure capacity in TKT to cope with additional loads associated with CTYD.	LOR to undertake review and report back. Review consequences & options.	Permanent solution included within NRB scope.	RSB	Decant Delivery Group	1	4	4	Open	1
		Failure to maintain all services whilst they are decanted is a business continuity risk	Regular update to 3T's programme Board. Regular meeting to update Operations Team, Executives and Chief's. Ops Team involved in Decant Delivery Group to ensure minimal/no impact on business.	Mitigation includes detailed operational commissioning plans to be developed.	DP	Decant Delivery Group	3	4	12	Open	1
<b>04 Decant - all Total</b>											<b>5</b>
07 Decant C RSCH FRONT CAR PARK		0 Construction delayed by RPAs inspection and/or non availability of BSUH RPA. Limited specialist resources available. Delay to programme to be compliant (4.20)	LOR provided construction programme for FCP, which identifies when RPA access to the site	Trust will then review the proposed plan at each identified point, identify how long testing would be expected to take and source RPA.	RSB	Decant Delivery Group	1	2	2	Open	1
		Completion of commissioning for radiopharmacy is delayed due to unexpected microbiology results	Agree commissioning and performance qualification in advance, and formulate options to outsource elements if licence compromised	To be progressed as part of Delivery Project Team work stream	Robert Brown	Decant Delivery Group	2	4	8	Open	1
		Environment Agency (EA) will not issue licence for radiation safety in accordance with decant designs. Applies to all areas with sealed sources. Note - Handover criteria in LOR contract needs to be confirmed through GMP including allocation of risk. (1.02)	Based on other previous projects. Impact can be high cost implications £20,000 and several months delay. Decant Project	To be progressed as part of Delivery Project Team work stream	Helen Cripps	Decant Delivery Group	1	4	4	Open	1
		MHRA Sign-off & validation of Aseptic suite. Front Car Park Building may not be able to be used. Note - Handover criteria in LOR contract needs to be confirmed through GMP including allocation of risk. Decant of Nuclear med	Engagement with MHRA	To be progressed as part of Delivery/Project Team work stream	Helen Cripps	Decant Delivery Group	2	4	8	Open	1
		Counter Terrorism Security Advisor (CTSA) sign-offs delays Decant project. (3.01)	Early engagement, throughout construction phase.	To be progressed as part of Delivery Project Team work stream	Robert Brown	Decant Delivery Group	1	3	3	Open	1
		Enabling works disrupt adjacent services (MRI service) through vibration or magnetic interference.	Report received for review. South MRI affected and trailer/off-site solution being investigated. Smaller plant solution enables North MRI to be used.	On-going discussions with users. Works programmed. Craning of modules complete. Potential risk related to external cladding works and lift installation.	Laura Hodnett	Decant Delivery Group	1	4	4	Open	1
		Asbestos contamination Barry Building Link - risk of more asbestos than assessed at R&D survey. This cannot be determined by a pre-construction survey until the building is empty.	MRI suite after 2000 when use of asbestos products banned. Likelihood very low	Survey allowed for in Phase 4 works	RSB	Decant Delivery Group	2	1	2	Open	1

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07 Decant C RSCH FRONT CAR PARK Total											7		
08 Decant D&E 545 &PCABIN	0		Condition of existing structures & services changes scope (exceeds assumptions in GMP) Caused by intrusive surveys not being able to be completed (4.12)	Good programme management		RSB	Decant Delivery Group	2	2	4	Open	1	
			Asbestos contamination 545 - risk of more asbestos than assessed at Management Survey (Type 2). (3.08)	Plan C works reduced - asbestos register inspected,	re-inspections carried out no new signs of asbestos identified. Risk reduced from 2x3	RSB	Decant Delivery Group	1	3	3	Open	1	
			Increase in design and works cost because of lack of drawn up SOA	SoA issued and 1:100 GA produced, so risk now more about change in brief		RSB	Decant Delivery Group	3	4	12	Open	1	
	Aspergillus	Risk of aspergillus to immuno compromised patients exacerbated by the impact of construction on the RSCH site. Impact on decant programme caused by delay whilst	Review of evidence from other construction sites and further testing as work on site	Liaison with Infection Control for appropriate mitigation measures.	Duane Passman	Decant Delivery Group	2	5	10	Open	1		
08 Decant D&E 545 &PCABIN Total											4		
10 Design Process 1	0		Response to flexibility policy not accepted. (Adapting services & building - future-proofing) Additional cost and redesign (1.06)		0	On programme. LOR to respond to BSUH.		0	3	4	12	Open	1
			Adverse weather conditions is above that anticipated (less than 1 in 10). Leads to delay		0	On programme	DP	Programme Board	2	3	6	Open	1
			Warrantees to the adjacent SPV for the children's hospital.	Negotiation with Kajima	Information on ground anchors has been provided	DP	Programme Board	3	4	12	Open	1	
			Fire Strategy interface for TKT needs to be integrated with design and operational parameters for TKT incorporating the addition of the Helideck, Trauma Lift and flues	Investigate jointly with design team and Trust fire officer	On programme	DP	Programme Board	2	3	6	Open	1	
			Noise & vibration in demolition - There may be additional control measures required over and above that currently included to maintain operation of departments in stage 1 building	WSP report has been reviewed and the methodology has been outlined for Trust to	Duplicate of 14/10	DP	Programme Board	3	2	6	Open	1	
			The Employer instructs the cessation of construction activities that are being carried out within the noise, vibration and dust levels defined in the Works Information	Check control measures allowed for in GMP (some booths move into the annex)	On programme	DP	Programme Board	4	3	12	Open	1	
			A change to the fire strategy contained in the Works Information is required by the Fire Brigade / Fire Officer for their agreement/ acceptance	Continuous liaison with Fire Brigade via Trust fire officers. Still awaiting sign off by fire	Risk reduced at GMP risk review meeting	DP		0	1	1	1	Open	1
	Section 278	The Employer does not enter into the Section 278 legal agreement with the council to allow the works to progress in accordance with the Accepted Programme	Engage early in the process - follow up July 2015 and discuss at next Main Scheme	Workshop to take place 06/06/15	DP	Programme Board	3	2	6	Open	1		
	Ground Conditions	Discovery of any contamination, soft ground, services, obstructions, archaeology, unexploded ordnance, swallow holes or radioactive materials in areas where the	More soil sampling and testing to be undertaken following experience of Decant programme	Sub group to be set up to oversee this with infection control involvement. More comprehensive clinical involvement required with immediate effect	DP	Programme Board	3	3	9	Open	1		
	Existing Structures	Asbestos is discovered within the Site, including any asbestos shown on existing asbestos registers.	Nuclear med - known asbestos and some has been removed (July 2015)	Risk reduced at GMP risk review meeting	DP	Programme Board	3	2	6	Open	1		
	Existing services	Any of the existing retained services are not adequate, in relation to condition, location and performance, such that the Contractor can not connect to without the need to	Additional work may be needed to remedy	Risk reduced at GMP risk review meeting	DP	Programme Board	3	3	9	Open	1		
	Stat Authorities	A statutory authority and/or utility provider does not work within the times shown on the Accepted Programme	Service diversions in	On programme	DP/PR	Programme Board	3	4	12	Open	1		
	Aspergillus	Risk of aspergillus to immuno compromised patients exacerbated by the impact of construction on the RSCH site. Impact on decant programme caused by delay whilst mitigations are identified.	Review of evidence from other construction sites and further testing as work on site progresses.	Liaison with Infection Control for appropriate mitigation measures. Also include a joint (Trust/PSCP) review of all associated construction risks, reviewing all potential hazards with agreed mitigations, for sign-off by all parties. Policy awaiting ratification in November 2015. Risk reduced following	Duane Passman	Programme Board	4	5	20	Open	1		
	Operations	Trust operational restrictions defined in the contract are changed as a result of variation in Trust requirements impact on design, construction methodology, programme, delay	Ensure in GMP and contract that methodology is specific inc access and	Has been escalated via Datix to BSUH Board to ensure that construction/programme staff and operational/clinical staff interface is seamless	DP	Programme Board	3	2	6	Open	1		
10 Design Process 1 Total											14		

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Count of Score													
WS#	Keyword	Title	Mitigation	Progress	Owner	Control	Probability	Impact	Score	Status	Total		
11 Trust Business Continuity		0 Commissioners cannot afford scheme (changes in the size and allocation of resources for health care) which undermines FBC	Mitigating this risk would include a regular updates/commissioning interface to confirm	Commissioning support requires further discussions and negotiations via Commissioner Oversight Forum and National Programme Board. Downside scenarios have	DP	Programme Board, Project Team, Local Health	3	5	15	Open	1		
	Trust Business Continuity	Legislative/regulatory change: non-NHS specific	Communication with authorities for early warning	None known.	DP		0	2	3	6	Open	1	
		Changes in taxation	Communication with authorities for early warning	None known.	DP		0	2	3	6	Open	1	
		Changes in the volume of demand for client services	Contingency to be included and sensitivities within financial model. OBC	In the FBC timeframe	DP	Programme Board, Project Team, Local Health	2	3	6	Open	1		
		Unexpected changes in medical technology	Robust business plan in conjunction with commissioners	In the FBC timeframe	DP	Programme Board, Project Team, Local Health	2	3	6	Open	1		
		Incorrect estimated cost of maintenance	Contingency to be included	Maintenance costs in FBC benchmarked within expected range of peer group.	DP		0	4	3	12	Open	1	
		Volume and case mix of activity estimated incorrectly to support services	Robust business plan in conjunction with commissioners & LTFM modelling has taken	Robust business plan in conjunction with commissioners & LTFM modelling has taken place.	DP	Programme Board, Project Team, Local Health	2	5	10	Open	1		
		Reconfiguration of local Health Economy/ CCGs priorities and impact of required efficiencies	Ensure strategic fit with emerging commissioner priorities.	Dialogue with commissioners and TDA is positive. Mitigations to the construction programme are being worked through and discussed with commissioners	DP	LHC SEG	3	4	12	Open	1		
		Adverse impact of needs of other CCG funded projects	Build in contingency. Liaison with other projects	BSUH fully engaged in whole health economy planning.	DP		0	3	4	12	Open	1	
		3Ts building being too small	Demand management strategies across health economy		0	DP		0	2	3	6	Open	1
		Site electrical Infra-structure is inadequate	Infrastructure requirements now identified and replacement	Allowance made in the Trust's Operational Capital programme for 2014/15 which was approved by TBoD on 31/03/14 with additional monies coming from 3Ts to cover	0	DP	Programme Board	4	4	16	Open	1	
		Commissioning process halted by major incident	Make pre-arrangements with surrounding / London Trusts to cover any Major Incident if our		0	DP	Design Team	2	5	10	Open	1	
		Increased costs and revenue risks associated with fragmented temporary Estate	Build in transition contingency. Develop detailed decant plans. Inclusion	Decant plans underway to being implemented. Transition costs included in revenue projections.	DP	Decant Delivery Group	3	2	6	Open	1		
		Changes in commissioning intentions re activity/repatriation.	Dialogue across the Sussex Cancer Network & with commissioners	Risk increased because of national changes to clinical networks which may affect the service configuration	DP	Programme Board	3	4	12	Open	1		
		Unclear requirements from NHS England a for instance changes to NHS Outcomes Framework.	Gain certainty from CCG and partner organisations e.g. NHS England Area Team	Ongoing dialogue with CCGs. Commissioner Oversight Forum has been established as well as National Programme Board.	DP	Programme Board	5	3	15	Open	1		
		Adverse impact of needs of other Trust projects such as site reconfiguration or Clinical Strategy.	Build in contingency and sensitivity within financial model	Programme management strategies have been adopted across 3Ts & Estates /Facilities	DP	Programme Management	4	3	12	Open	1		
	Overall Affordability- revenue. BSUH has to make savings of £173m (including Pathology and EPR) between 2013/14 and 2021/22 and 3Ts added £15.6m to this (down from £30m)	Enabled growth as envisaged by LTFM will reduce affordability gap. 3Ts will facilitate this	Level of savings required remains challenging. 'Do nothing' option has been worked up, which has quantified the impact of 3Ts on activity/income post construction	0	DP	Programme Board	2	5	10	Open	1		
	Failure to pay contractor on time	Mitigation includes setting up a purchase order, and ring fencing 3Ts budget for use		0	DP	Programme Board, Project Team, Local Health	4	5	20	Open	1		
<b>11 Trust Business Continuity Total</b>											<b>18</b>		
12 Main Scheme Capital	Main Scheme Capital	Response to flexibility policy not accepted. (Adapting services & building - future-proofing) Additional cost and redesign (1.06)		0	0	DP	Programme Board	3	4	12	Open	1	
		Legislative/regulatory change having capital cost consequences: NHS specific	Communication with authorities for early warning	Increased tendency to single rooms addressed in OBC.	DP		0	3	3	9	Open	1	
		Unexpected changes in the epidemiology of the people in the catchments area	Robust business plan in conjunction with commissioners including clinical	In the FBC timeframe	DP	Programme Board, Project Team, Local Health	1	2	2	Open	1		

Count of Score	WS#	Keyword	Title	Mitigation	Progress	Owner	Control	Probability	Impact	Score	Status	Total
12 Main Scheme Capital	Main Scheme Capital	Capital Costs / Equipment	Draw up accurate equipment list on agreed 1.50s	Additional procurement resource now available	DP	Programme Team	3	4	12	Open	1	
		Associated or adjacent projects insufficiently 'joined up'	Ensure Trust provides overview strategy and control and co-ordination across	Increased complexity of diverse capital projects across RSCH reflected by this rating. Portfolio management being discussed via work being undertaken by I Nerney	DP	Development of Interim Strategy	3	4	12	Open	1	
		Estimated income from income generating schemes is incorrect	Contingency to be included and sensitivities within financial model	FBC activity modelling is in process.	DP	Programme Board, Project Team, Local Health	3	4	12	Open	1	
		Changed DH priorities influences scheme, Department of Health imposes terms outside of the P21 framework, leads to reduced return for LOR (2.05)	Communication with TDA and commissioners on on-going basis.	Investigate comparative cost/programme implications of accommodating change during construction or post-completion. Continue negotiation with Commissioners to	DP	Programme Board	3	3	9	Open	1	
		Change in requirements of the NHS trust. The NHS trust may require changes to the design, leading to additional design and construction costs. FBC delay or reduced efficiency	Keep change register and issues log fully up to date.	Robust change policy in place for design process	DP	Programme Board	3	4	12	Open	1	
		HMT requirement to significantly reduce size and scope of scheme	Provide full justification of building size and scope to HMT	Full justification of building size and scope provided to TDA. Approval of OBC has reduced the likelihood.	DP	Programme Board	2	5	10	Open	1	
		Failure to sign up partner Trusts / Medical School /CCG to the brief	Work with Partners - Medical School and CCGs	Negotiations with BSMS close to fruition re financial settlement for the cost of this space.	DP	Research & Education Group	4	4	16	Open	1	
		Support with transitional costs is withdrawn	Transitional costs have been agreed with commissioners to be funded by 2% top slice	Ongoing support with transitional costs requires confirmation as part of FBC approval process	DP/SP	Commissioner Oversight Forum and National	3	5	15	Open	1	
		Introduction of Private Finance 2 (PF2)	Delays may be less than previous PFI (circa 18 months rather than 3-4 years)	PF2 shows marginal financial benefit which is off set by time delays (which reduce the clinical benefits as they are delayed). However PFI still not affordable	DP	Programme Board	2	5	10	Open	1	
		Potential switch of procurement route from P21 to P21+ under direction from DH leads to delay and cost of re-procurement. Noted in Gateway review (1.08) & HMT approval letter	Demonstration of adherence to procurement best practice. Legal advice	HMT /DH queries re procurement have been addressed. Approval letter from HMT has made specific reference to the need for legal advice on this issue. This has been provided	DP	Programme Board	2	4	8	Open	1	
		Council Overview and Scrutiny Committee/Health and Wellbeing Board don't support scheme	Ensure all documentation available and processes rigorously followed	Regular presentation to HOSCs have taken place and will continue. Commissioner oversight Forum now being reestablished.	DP	Programme Board	1	4	4	Open	1	
		Prudential Borrowings used as procurement route instead of Public Dividend Capital could add £15.6m to CIPs programme over next 10 years and have an adverse effect on Trust's	Ensure borrowing is under best possible terms for BSUH	Discussions with DH have focused on the availability of Public Dividend Capital as a preference. Final mix of PDC/PBL will be a key aspect of FBC approval. Conditions of	DP	Programme Board	4	4	16	Open	1	
		Trust do not vacate all of site in a timely manner as part of the decant leads to delay to start of construction, cost of inflation, increased duration of decant and associated	Joint risk mitigation meetings. ( Site Logistics Group) Mitigation	Partial site handover is being planned in order to control impact. Query impact to be reduced in February 2016.	DP	Programme Board	5	5	25	Open	1	
Main scheme capital	There is a risk that LORs actions may result in consequential losses greater than 10% of the GMP figure (note: the consequential loss provisions in the P21 contract will be capped	LOR team performance, methodology, monitoring	DP	Programme Board	1	5	5	Open	1			
12 Main Scheme Capital Total											17	
14 Design Process Main Scheme 2	0	Failure to incorporate Control of Infection best practice	Robust FBC process incl design briefs & generation of ADB sheets in conjunction	Close liaison with BSUH Infection control team is ongoing.	DP	Programme Team	2	3	6	Open	1	
		Failure to achieve AEDET	Robust FBC process incl design briefs & generation of ADB sheets in conjunction	AEDET will need to be refreshed for the new design.	DP	Programme Team	3	3	9	Open	1	
		Failure to translate operational policies into design	Robust FBC process incl design briefs & generation of ADB sheets in conjunction	User involvement via 1:200 and 1:50 processes required to mitigate this risk.	DP	Programme Team	4	3	12	Open	1	
		Vibration disruption to linacs during construction of stage 1	Investigations have been undertaken to determine impact.WSP report has been	Workshop held 10th April, Notes issued April 14th	DP	MSDG	3	5	15	Open	1	
		Status and risk of future changes with Building Regs and Building Control. (3.23)	Determine what building regs will apply and when the building regs application is submitted	Trust subsequently provided with Royal LOR to advise	DP	MSDG	4	3	12	Open	1	
		Design or performance requirements relating to energy and carbon above and beyond Building Regulations requirements. Trust brief issue. Change spec of glass (3.25)	Keep thermal model up to date.	On programme	DP	MSDG	2	2	4	Open	1	
		Cleaning / Access strategy not yet reviewed with the Trust may delay or change the design (3.26)	Design meetings with the client	On programme	DP	Facilities and Estates	2	2	4	Open	1	

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14 Design Process Main Scheme 2	0		ENT audiology booth may not work above the car park due to mitigation in place which may not be sufficient. This could be caused by Trust changing requirements (dealt with as a Design of Helipad (inc Weather protection - stainless steel screens). Leads to redesign. (3.54)	Review testing requirements with the TRUST	On programme	DP	MSDG	1	5	5	Open	1
			Underground obstructions or unstable adjacent structure to piled foundations (4.01)	To be discussed on mobilisation	On programme	DP	MSDG	2	1	2	Open	1
			Design quality aspirations in excess of budget in tender packages, leading to higher spec, additional cost. Redesign (5.02)	To be discussed on mobilisation	On programme	DP	MSDG	4	2	8	Open	1
			PIR Insulation - currently assumes PIR Insulation in design. PUR would be more expensive. Trust decision - needs resolving by GMP (NEW)	To be discussed on mobilisation	On programme	DP	MSDG	1	1	1	Open	1
			Interfaces/impacts from other projects on site during Decant - Trust/PF/Utilities contractors / capital works (LOR, Willmott Dixon infrastructure - Children's hospital, audiology)	Interface planning tool required to track complexities across the site	Initial meeting held with Estates team across BSUH to begin to track interdependencies. Development control plan in existence and regularly updated	DP		0	4	4	Open	1
			Sign off not achieved to programme dates. 1:50 non-standard rooms. Additional comments provided after programme sign off date - leads to increased time and cost of Failure to design to brief (3.02)	Clear programme management	On programme	DP	MSDG	3	5	15	Open	1
			80 temporary car parking spaces will need to be provided during the construction period away from the RSCH site. Discussions with the council have yet to yield a satisfactory	Manage Architects and end users. Ensure design requirements are explicit within brief	Robust change process in place (stage D/stageE processes).	Gary Speirs	MSDG	3	4	12	Open	1
			Asbestos and contamination - unknown extent of asbestos and contamination in existing buildings. (No allowance made in GMP for removal). Asbestos surveys are costed and	The council are now engaged in working with us to secure a resolution including	DP in discussions with B&HCC re relocation of SMH tennis courts and provision of additional parking there.	DP	Programme Board	4	4	16	Open	1
			Project specific requirements may impact on the ability to meet statutory requirements. Conflict between brief & standards. Trust adapt their brief & impacts on design	In Nov 14 - asbestos surveys update carried out and passed to LOR	Contingency now in place via costed risk register. Not able to mitigate fully until building handed over, likely September 2015 stage 1 and 2018 stage 2	DP	MSDG	5	2	10	Open	1
			The proximity of the existing (and decant) buildings is not as the current information provided by the Trust which may change the design. Resulting from Design status (stage D)	Review changes to Fire Regs / Fire Engineered solution	LOR are proving compliance statement to BSUH to review in September 2014	DP	Design Team	3	2	6	Open	1
			Following the wind tunnel test and VE study, further Helideck design may alter location / height / treatments / services. If design changes significantly it will need to go back to	3D model carried out to mitigate this - now checking on site. LOR to validate the surveys	On programme	DP	Design Team	1	2	2	Open	1
			Bird protection measures on the building allowed for in the GMP (to be clarified) may not be sufficient. Protecting the new building from squalls	Take revised design to Planning (aesthetics of Helideck)	Design has now been amended and now looks different. Planners to be notified. Decision to be made on accommodation / water tanks on roof - currently getting prices	DP	MSDG	3	2	6	Open	1
			Construction Inflation increasing beyond estimation in FBC after the initial 2 years. Excludes VAT. Leads to increased cost outside GMP	Review after stage 1	On programme	DP	MSDG	2	1	2	Open	1
			Construction works are stopped or disrupted in the Thomas Kemp Tower (TKT) due to noise or vibration from either the Helipad works or other works associated with the TKT	INFLATION RISK IS ACCOUNTED FOR OUTSIDE THE RISK REGISTER	Construction inflation fixed for Stage 1. Stages 2 and 3 subject to a review process.	DP	MSDG	4	3	12	Open	1
			The Employer does not achieve the BREEAM credits which he is required to achieve under the Works Information	Reference HIA report for mitigation strategy. LOR have received report and have	Level 15 drilling, to test the impact on TMBU: The test works carried out on 31/03/15 showed that the diamond drilling method caused little to no sound or vibration within	DP	MSDG	3	3	9	Open	1
			A planned engineering service changeovers is delayed due to operational requirements within the existing Trust Estate. Changeovers to be identified on the Accepted Programme	Ensure coordination between PSCP and Trust to fulfil BREEAM requirements	Ensure coordination between PSCP and Trust to fulfil BREEAM requirements Review BREEAM operational (Trust) requirements in ORC refresh and include in	DP	Programme Team	2	2	4	Open	1
			A Major Incident occurs, as defined in the NHS Emergency Planning Guidance (2005) as "any occurrence that presents serious threat to the health of the community, disruption to the	Design and construction sequencing to be coordinated closely with Trust Operational	On programme	DP	Facilities and Estates	2	2	4	Open	1
			A tower crane is stopped due to air traffic use of the Helipad/ Helideck. The Contractor has allowed for up to one hour a week of crane stoppage due to air traffic use	Manage through construction; Consult with user groups - including	Risk reduced at contract signing workshop	DP	MSDG	2	4	8	Open	1
			Planned or emergency work within the hospital estate that affects the works.	Contingency plan including agreement with AAT that they would make the	Required operational policy when in use.	DP	MSDG	1	3	3	Open	1
				Process set up to review access and maintenance with the Trust	On programme	DP		0	2	2	Open	1

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14 Design Process Main Scheme 2	0		The condition of the Thomas Kemp Tower (TKT) existing structure is not as the existing drawings of the surveys carried out by the Contractor before the 17/07/15, included in the Commissioning process is compromised by operational demands	Carry out Gap analysis on structural tests while undertaking refurb works in level 10	risk reopened with more defined wording at contract signing workshop	DP	MSDG	2	3	6	Open	1	
	0	Commissioning of stage one and stage 2-	Construction delayed by RPAs inspection and/or non availability of BSUH RPA. Limited specialist resources available. Delay to programme to be compliant (4.20)	Proactive programme management and sufficient experienced internal commissioning	Learning from decant projects will be key.	Duane Passman	MSDG	2	4	8	Open	1	
		RPA	Failure to meet deadlines and quality of specification/URS for Nuclear medicine / aseptic unit for Main Scheme stage 1. Risk continues through design, construction and up	LOR will provide construction programme, which identifies when RPA	On programme	DP	Design Team	2	3	6	Open	1	
		Trust infrastructure	Final connections into Trust infrastructure proves inadequate. This will result in additional work to remove or repair to enable linking to be carried out	Additional work may be needed to remedy	Most service diversions works are carried out early on	DP	MSDG	3	3	9	Open	1	
		Operational Interfaces	There is a risk that stakeholders within the Trust are unsatisfied with the construction, demolition, excavation and any other method statements applicable causing significant	Identify and manage key stakeholders - clear authorisation	Various meetings held with clinical ops staff to identify and progress mitigation strategies. Clear authorisation for works on site, or any requests to cease work on site is also	DP	MSDG	4	5	20	Open	1	
		Energy Centre	Any existing hospital building that is supplied by the new Energy Centre requires more power than that required in the Works Information	Monitor power usage	Risk opened at contract signing workshop	DP	MSDG	1	3	3	Open	1	
		Shutdowns	The Employer does not shut down hospital areas or services to allow the Contractor to make connections with existing buildings and services. This will include connections of	According to logistics programme	Risk opened at contract signing workshop	DP	MSDG	2	3	6	Open	1	
		Japanese knotweed	Discovery of any invasive plants, including Japanese Knotweed, that require treatment or removal.	Regular surveys	Risk opened at contract signing workshop	DP	MSDG	1	3	3	Open	1	
		DNO	The existing DNO (Distribution Network Operator) infrastructure is not capable of allowing connection of the CHP (Combined Heat & Power) engine without an upgrade to	Monitor power usage	Risk opened at contract signing workshop	DP	MSDG	1	3	3	Open	1	
		CHP	DNO will not enter into an agreement to allow the CHP to feed back into the mains electrical infrastructure	Negotiations with with DNO	Risk opened at contract signing workshop	DP	MSDG	1	3	3	Open	1	
		Planning VE	Planning permission relating to a value engineering item is not given in a timely manner or at all. These are the omission of cladding to	Utilisation of planning tracker to mitigate	Risk opened at contract signing workshop	DP	MSDG	2	3	6	Open	1	
	14 Design Process Main Scheme 2 Total												40
18 Engagement Staff	0		Staff engagement and availability	Comms strategy	Ensure that the unions and staff side are involved in each stage of the business case development	R Beard	Comms Strategy	2	4	8	Open	1	
			Failure to get key staff to buy into plan	Continue process of gaining departmental sign off and PB approval	Staff engaged and supportive during planning process but somewhat impatient regarding the continuing delays.	R Beard	Programme Board	2	4	8	Open	1	
			Disruption to key project /Trust staff structure and individuals	Ensure cover for key roles and contingency plan. Ensure retention of team members in	All posts recruited to.	DP	Programme Team	2	4	8	Open	1	
			Loss of staff due to changes/disruptions/relocations	HR Strategy	A commissioning and business continuity plan has been drafted as part of the FBC.	DP		0	3	3	9	Open	1
			Project team retention	Maintain team size in order to fulfil demands of design process and FBC production. We	One change consultant has now been appointed who started in August 2014. We have now appointed externally to the 2nd post	DP	Programme Team	1	4	4	Open	1	
			Loss of Programme Director / Manager	Monitor workload and create contingency plan, potential cross-skilling, succession	DP now working full time on 3Ts as per Gateway review	SP	Exec Team	2	3	6	Open	1	
18 Engagement Staff Total												6	
21 ICT	0		Nuclear medicine required isotope monitoring software to be installed in decant location but this is not funded by 3Ts	Dept needs to seek agreement regarding who will fund this requirement	Works complete. Risk is now on decision regarding funding	Gary Steen		0	2	3	6	Open	1
	0		Loss of access to clinical IT services	Resource with Trust Information Team. Task/Activity & programme scheduling		Gary Steen	Decant Delivery Group	3	1	3	Open	1	

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Count of Score														
WS#	Keyword	Title	Mitigation	Progress	Owner	Control	Probability	Impact	Score	Status	Total			
21 ICT		0	Integration of direct works contractors such as IM&T and AV	Programme and project managers to ensure that IM&T elements are fully considered in.		0	Gary Steen	0	3	2	6	Open	1	
			IT and telephony services are disrupted during clearance and stage 1 build	Vibration and dust mitigation activities are undertaken. Replacement ducting	Site logistics presentation took place in March 2014.	RSB		0	1	4	4	Open	1	
			Lack of funding for replacement of IP Telephony	Should this continue over future financial years then either alternative function will	Going to IPG in March in March 2015.	G Steen	EPR Board		3	3	9	Open	1	
			Failure to implement EPR	Full implementation of EPR is in process		0	G Sten	EPR Board		1	3	3	Open	1
			Continuing alignment with Trust IM&T developments	Accept stage D+ design to avoid FBC approval delay	Process being managed as part of market testing. Stage D design accepted	G Steen	Programme Team		4	4	16	Open	1	
			Inadequate funds for IM&T requirements	Inadequate funds for IM&T density requirements	the mitigation includes identifying the IM&T requirements throughout each	0	G Steen	Programme Team		4	3	12	Open	1
<b>21 ICT Total</b>											<b>8</b>			
24 Stakeholder support	Engagement Public		poor public relations reduces public support for the scheme	trust comms strategy	Comms strategy being implemented	R Beard	Comms Strategy. Review Programme		1	4	4	Open	1	
			PPI / external stakeholder engagement	Ensure stakeholders are aware of strategy behind and need for developing new	Regular involvement at all levels is happening including PPDP	R Beard	Comms Strategy		1	4	4	Open	1	
			Impact of construction. There is a risk that stakeholders outside the Trust are unsatisfied with the construction, demolition, excavation and any other methodologies applicable for	Identify and manage key stakeholders including local residents. Clear lines of		0	R Beard		0	3	4	12	Open	1
	Planning Application Main		Planning submission and interplay with local stakeholders re traffic	Increased liaison with B&HCC		0	DP		0	3	4	12	Open	1
			Introduction of Planning Gain Supplement	Continuing regular dialogue with city planners and research. Include contingency	Optimism bias within OBC allowed for this cost	DP	LHE chief execs group		2	3	6	Open	1	
			Options on Tower or Stage 1. Discussions with planners and local residents are required regarding the helipad location. This has added additional cost to the scheme. (Main 3.51)	Continued invasive structural surveys to assess level of risk and necessary cost	Structural load concerns have been alleviated. Construction noise can also be mitigated successfully. There remains the issue of the noise impact of the helicopter on	DP	Programme Team		2	4	8	Open	1	
			Location of consolidation centre (1.05)	Proactive liaison with B&HCC about likely location	Risk reopened as has been raised at HLG	DP/ LOR			0	2	3	6	Open	1
			Number of bicycle spaces to be provided on the site in excess of numbers originally proposed.	Liaison with B&HCC regarding the planning conditions continues	Site provisionally identified as NRB subject to planning processes.	DP	Programme Board		2	4	8	Open	1	
			Discharge of Planning Conditions – Trust: Brief/Scope/drawings within approved Planning consent are changed by Trust or third party which increases	Cross reference existing baseline wind measurements against sites if there are	Planning conditions tracker now in place	DP	Programme Board		2	2	4	Open	1	
	The Employer does not obtain permissions and/or consents from 3rd parties, which are the Employers responsibility to provide, to allow the works to progress in accordance	Identify in the programme the milestones for the TRUST		0			0	2	3	6	Open	1		
<b>24 Stakeholder support Total</b>											<b>10</b>			
26 Workforce Planning	Workforce Planning		Operational policies for 3Ts may not have been developed in sufficient detail to enable workforce implications to be identified. The impact of new physical designs of workforce	Robust FBC process incl design briefs & generation of ADB sheets in consultation	PB discussion regarding difficulty in progressing this workstream raised this risk	Gary Speirs	Programme Team		4	3	12	Open	1	
			3Ts significantly increases capacity in some of the harder-to-recruit specialties (eg. general and neuro-Critical Care). The Trust-wide Recruitment & Retention and workforce	Role redesign may be required	the Trust's education commissioning requirements for the academic year 2013/2014 have been submitted. This includes increases in commission numbers	0		0	4	3	12	Open	1	
			The LTFM and 3Ts FBC assume 3% year-on-year pay cost efficiencies, and additional capacity at marginal cost (LTFM assumes 50% of tariff). Risk: the Trust will not be able to	Mitigation: an integrated workforce development/CIPs programme has been	Affordability gap between LTFM and Workforce plans as projected by bottom up review equates to a significant revenue gap. New projections will be based on a mix of	Helen Weatherill/ Spencer Prosser	HMB		4	4	16	Open	1	
<b>26 Workforce Planning Total</b>											<b>3</b>			

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Count of Score												
WS#	Keyword	Title	Mitigation	Progress	Owner	Control	Probability	Impact	Score	Status	Total	
27	Education, Research & Sim	Simulation	Business case for simulation facilities (faculty, administration, equipment, backfill costs) may not be affordable	Development of Simulation Strategy	3Ts will incorporate equipment in the BoQs. However, if it is unaffordable, this will be sent back to leads to work up a separate case.	BSUH	Simulation Steering Group	1	3	3	Open	1
27 Education, Research & Sim Total											1	
31	Decant Equipment	0	Trust supplied equipment Front Car Park Groups 2,3,4 is delayed. Information delayed or equipment delayed. Potential delay to opening and Decant programme and	Full equipment schedules now developed.	Full equipment schedules now developed.	RSB	DDG	3	3	9	Open	1
31 Decant Equipment Total											1	
32	Main Scheme Equipment	0	Access routes and weight loadings for large equipment.	Under review with LoR and key equipment suppliers to quantify.	0	DV/JM	0	3	4	12	Open	1
			Time and resource limitation	Look to identify when additional resource is likely to be needed, and how this could be	Staff now in place so risk reduced.	DV	0	3	4	12	Open	1
			Delay to equipment delivery (Group 2, 3) and installation (Group 3, 4). Caused by Trust delays. Leads to programme delays in construction and/or operational	Escalate as necessary	0	DV	0	2	4	8	Open	1
			Equipment is based on BoQ Rev. (doc ref required ) F03. Awaiting aligned equipment schedule. Could lead to additional/changed equipment added post contract. Impact could	Check equipment schedules during contract signing - use document reference in	0	DV/LOR	Programme Team	3	2	6	Open	1
			Delay to equipment delivery (Group 2, 3) and installation (Group 3, 4). Minor quantity of transferred kit. Caused by Trust delays. Leads to programme delays in construction and / or	Set up monitoring processes to track progress with selection, ordering and delivery of	0	0	0	3	4	12	Open	1
32 Main Scheme Equipment Total											5	
34	Main Scheme P21 Delivery	0	Failure to design to HBNS / HTMS (not approved as derogations) - Refer to Contract Terms for order or priority of HTMs, HBN and Building Regulations	Ongoing maintenance and signing of derogations register. Derogations workshop	Reviewed at joint session with PSCP 09 Sep 14 and reduced with PSCP. Risk has reduced since 2013 due to going through process and opportunity to derogate. If Trust delay	PSCP	PSCP	2	2	4	Open	1
			Unforeseen loss of services (electricity, water and drainage or gas) due to works including damage to services. Disruption to hospital / surrounding area. Biggest risk on interface	Method statements, permits to work. Introduce outage schedule with regular	0	PSCP	PSCP	1	3	3	Open	1
			Unforeseen ground conditions on areas which LOR have free open access i.e. no above ground structures. Includes contamination, soft ground, services, obstructions/archaeology	SI of available ground has been carried out. Revisit surveys to identify any additions	Risk re-opened following FBC review. Surveys to be continued as required.	PSCP	PSCP	3	3	9	Open	1
			Scheme impacts on surrounding area to a greater extent than indicated in the Environmental Impact Assessment targets (noise, dust, vibration)	HIA and EIA	Ongoing communication with local residents will be maintained	PSCP	PSCP	3	2	6	Open	1
			There may be a lower supply of local labour than planning conditions require (obligation in section 106). Extra cost to provide another local benefit instead of local labour. 20% local	Obtain full definition of "local" of specific BN postcodes and "20%" commitment	Obtain full definition of "local" and "20%" commitment. Understand how this is monitored. Through enquiry and mid-tender interview	PSCP	PSCP	2	2	4	Open	1
			Vandalism and damage on site during construction. Leads to additional cost and delay	LOR procedures, Trust presence CCTV and other security measures	0	PSCP	PSCP	3	1	3	Open	1
			Construction Logistics - assumptions made in pricing Construction Environmental Management Plan (CEMP) are exceeded. (Note - CEMP was accented by Planning)	Construction logistics plan to be presented.	Risk lowered in GMP workshop July 2015. In provisional sums.	PSCP	PSCP	2	2	4	Open	1
			Exchange rates volatility throughout project. Contractors from EU. (Majority to go through brokers in the UK). Increased costs.	Maximise placing of orders with sub contractors in sterling	0	PSCP	PSCP	2	2	4	Open	1
			Third party insurance claims (Public Liability) on adjacent properties (Children's hospital, neighbours) caused by construction. Cost may be covered with insurance apart from the	Design Temporary works and perm works. Monitor throughout, minimise movement	Movement monitoring measures in place and risk control measures have been introduced. Will need regular review.	PSCP	PSCP	4	3	12	Open	1
			Performance of design team may be lower than anticipated. Caused by performance of individuals, disruption to the team due to re-starting. Redesign & programme Reputation	QA of designers; lessons learnt on other projects. Replacement of	risk reviewed. GMP review in July 2015. To be monitored during construction process.	PSCP	PSCP	3	2	6	Open	1
Deterioration of building fabric or MEP. Caused by materials or workmanship failing to meet specification required for coastal environment. Unless over ruled by	Specify adequate materials - check specification and alternatives	Risk reviewed at GMP workshop July 2015	PSCP	PSCP	2	4	8	Open	1			
Disruption to hospital staff/public (ENT / Linacs / MRI) during construction where LOR exceed agreed Noise, Dust, and Vibration limits set out in the Contract resulting in instruction to	Planned and managed disruption	Baseline measures have been included in the contract. Parameters for agreed tolerances will also be in the contract	PSCP	PSCP	2	2	4	Open	1			
			Consider acoustic									

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Count of Score													
WS#	Keyword	Title	Mitigation	Progress	Owner	Control	Probability	Impact	Score	Status	Total		
34 Main Scheme P21 Delivery		0	Potential impact on existing roads - access / condition (both inside and outside the hospital). Caused by planning condition to revisit road conditions at the end of stage 3	Develop contingency plan	Develop contingency plan. Carry out condition surveys pre construction as per CEMP.	PSCP	PSCP	2	1	2	Open	1	
			There may be a risk that the Site Waste Management Plan (SWMP) targets are not delivered. Impact is a penalty and possible change to methodology	Part of the CEMP	Implement plan which has been agreed.	PSCP	PSCP	2	2	4	Open	1	
			There may be a lack of design co-ordination caused by the partial stage E	QA design and coordinate between services REVIT model	Risk raised after LOR FBC review. Requires continual monitoring.	PSCP	PSCP	3	2	6	Open	1	
			IT advances mean that REVIT models within BIM will need to be migrated which leads to loss of information. Currentity (2015) REVIT is seen as the software of choice in future the	Plan additional resource to manage and train when it happens. Back ups - Undertake drive		0	PSCP	PSCP	4	2	8	Open	1
			Failure to obtain Building Control sign off. Leads to delay to programme, additional cost.	Continued engagement with certifier and progressive sign off.	Risk transferred to BSUH .see Main scheme 14/19.	PSCP	PSCP	3	3	9	Open	1	
			Flooding of the construction site due to surface or ground water. This would delay construction and may require pumping etc (note TKT Tunnel) Ground water remains a	Design includes removal of all soakaways included in the South service road		0	PSCP	PSCP	2	2	4	Open	1
			Downtime for cranes is greater than allowed for in the programme in GMP. Caused by being winding off. Winding off of Cranesage held as an LOR risk up to the 10 year event	Allowances made 15% for six cranes		0	PSCP	PSCP	3	3	9	Open	1
			Misalignment of tolerances between works packages. Gap analysis. Design development, manufacturing tolerances, spread of +/- tolerances accumulation of tolerances within	Review and compare works information for contract signing Design development	QA process within design to be introduced and maintained.	PSCP	PSCP	3	2	6	Open	1	
			There may be unforeseen interface gaps between packages throughout procurement. in terms of quantification and scope of works	Risk reviewed at GMP workshop July 2015	Risk reviewed at contract signing workshop.	PSCP	PSCP	2	2	4	Open	1	
			Lack of engagement to BIM by subcontractors - lack of expertise. Additional time to train subcontractors to work with BIM	Workshops and training with the supply chain		0	PSCP	PSCP	4	2	8	Open	1
			Weather conditions are worse than anticipated in programme durations leads to unrecoverable delay (i.e. less than 1 in 10 event in CE process) as defined in the NEC /		Requires monitoring and management	PSCP	PSCP	2	3	6	Open	1	
			Discharge of Planning conditions – LOR: Unable to discharge planning conditions owned by LOR which increases costs/resources/programme. Caused by delay	Get agreement from Planners early.	Get agreement from Planners early. Re-opened following LOR review for FBC	PSCP	PSCP	3	3	9	Open	1	
			There is a risk that there the CDM H&S risks (see CDM register) are not designed out resulting in buildability issues (LOR) or operational or methodology costs. (Trust		Risk raised at GMP workshop July 2015 . Requires ongoing monitoring and management.	PSCP	PSCP	3	3	9	Open	1	
	Stage E design	Planning approval of changes-risk that in approving material planning changes in Stage E design, planners do not approve or that the there are process costs of netting it	Meet planners to get approval - Trust and LOR	Some contracts and conditions still require approval by B&HCC.	PSCP	PSCP	3	2	6	Open	1		
	Design	Delay in the resolution of the design to Value Engineering items impacts the design completion of the Project	Priorities resolution of Value Engineering items with the Design Team target to close out	Risk raised at contract signing workshop	PSCP	PSCP	2	3	6	Open	1		
	Procurement	Failure to secure "Buying Gains" included in the GMP	Further development of procurement strategy and robust budget management	Risk raised at contract signing workshop	PSCP	PSCP	2	3	6	Open	1		
34 Main Scheme P21 Delivery Total											28		
15 NRB		0	Ground Conditions - Contamination, UXB, archaeology, fossils, human remains, obstructions, sink hole, additional services.	Ground surveys to be undertaken	On NRB 16 (63) so duplication	RSB	Decant Delivery Group	1	3	3	Open	1	
15 NRB Total											1		
16 P21+ GThps	Approvals		Derogations not being accepted by Trust	Team to ensure that the stakeholders have sufficient time to review derogations and	closed at GMP submission	Galiford Try		0	2	4	8	Open	1
			Reputational damage (internally and externally) through poor communication, lack of benefits realisation, not meeting programme	Benefits realisation being reviewed through FBC process and risk and benefits meeting to		0	Trust	0	3	4	12	Open	1
			GMP is not within delegated approval limits	Early cost plan to identify cost pressures and manage scheme within defined budgets	closed at GMP submission	Trust		0	2	5	10	Open	1

Count of Score													
WS#	Keyword	Title	Mitigation	Progress	Owner	Control	Probability	Impact	Score	Status	Total		
16 P21+ GThps	Approvals	Additional approvals are required by Trust Board which would delay approval	Project Director to report regularly to Trust Board and highlight any movement from current	closed at GMP approval	Trust		0	2	5	10	Open	1	
		Proposal for BREEAM Very good not accepted by planners	Clear statement required pre agreement to be sought from planners as part of early		Trust		0	3	5	15	Open	1	
		Stage 3 Approvals and Contracts not implemented in time leading to delayed design deliverables	P21 Stage 3 contracts to be finalised asap and design team instructions issued. Trust to		Trust		0	4	5	20	Open	1	
		Statutory approvals not received	Early identification of Statutory bodies that need to provide approval required		Trust		0	3	5	15	Open	1	
		GMP not approved by 3Ts Programme Board	Engagement with Project Board through GMP development	closed at GMP submission	Trust		0	2	5	10	Open	1	
			Stakeholder list to be reviewed to ensure completeness		Trust		0	3	4	12	Open	1	
	Client brief	Scope of project changes and difficult to fix brief	Design team to work closely with project team to reflect user requirements			Trust		0	2	5	10	Open	1
		Service requirements change during delivery of the scheme resulting in change of scope.	Client sign off at 1:50 stage achieved			Trust		0	1	3	3	Open	1
		Trust stakeholders not carried along with the project developemnt process, resulting dissent and need for late revision in scope, and/or project not meeting required outcomes	Key stakeholders to be identified and engaged			Trust		0	2	5	10	Open	1
		final design and layouts not functional for activity	Care to be taken to ensure designs meet staff needs and derogations are understood and do not compromise			Trust		0	2	5	10	Open	1
		Changes to the wider 3Ts project impact the current proposals	Project team to manage the scheme requirements in the context of the 3Ts			Trust		0	1	4	4	Open	1
		Inadequate or late wider public consultation, results in late changes in scope	Key stakeholders (predominantly local authority, local residents and services in close			Galiford Try		0	1	4	4	Open	1
		Design to current brief but does not allow for future proofing / remodelling	Trust risk - design to be future proofed as far as possible without impacting on budget			Trust		0	2	3	6	Open	1
		Failure to incorporate Art / graphics into the design appropriate to the project				Trust		0	1	3	3	Open	1
		Risk of changing requirements and design sign-off by user groups - Security, infection control, IT, Fire officer, laundry, cleaning etc.	Trust to coordinate stakeholder internally to ensure no changes to signed off design			Trust		0	3	3	9	Open	1
		Operational policies not finalised to allow design works	Operational policies to be progressed in parallel with developing design proposals. Are			Trust		0	2	4	8	Open	1
Client Ops	End User disappointment with accommodation	Stakeholder involvement in developing designs			Trust		0	2	5	10	Open	1	
	Client Commissioning and Co-ordination of Group 2,3,4 equipment	Client commissioning plan to be developed for 'soft landing' and communicated in			Trust		0	2	4	8	Open	1	
	Customer / Patient perception whilst works are carried out	Coordination of Contractor logistics plan and Trust signage / notices etc.			Trust		0	2	4	8	Open	1	
Design / Construction	Maintaining service road, clinical services specifically with respect to shutdowns, isolations and drainage. Risk associated with stoppages due to noise, dust, vibration cause	Construction plan to minimise disruption to access road, clinical services and discomfort			Trust		0	1	4	4	Open	1	
	Design team unable to meet the required timescales to deliver ntbc and gmp.	Ensure resources identified, deliverables and programme defined and budgets confirmed	closed at GMP submission		Galiford Try		0	3	5	15	Open	1	

Count of Score												
WS#	Keyword	Title	Mitigation	Progress	Owner	Control	Probability	Impact	Score	Status	Total	
16 P21+ GThps	Design / Construction	Design deliverables for GMP not adequately defined leading to gaps in information required, lack of pricing certainty and risk	Design team deliverables to be clearly defined and liaise with the Trust		Trust		0	3	3	9	Open	1
		Timescales for design development do not allow for adequate consultation and interim sign off of developing proposals leading to reworking abortive costs and/or delays	Trust to be involved in design development meetings where required and ensure		Trust		0	3	3	9	Open	1
		Programme benefits from using modular construction do not materialise	Meet with suppliers to validate programme assumptions and seek references		Trust		0	3	5	15	Open	1
		M&E design philosophy not signed off	Concepts to be circulated and Trust to review and sign off. M&E Decision to be held		Trust		0	2	4	8	Open	1
		IT design and Trust scope	IT concepts to be issued and mtg to be arranged to review IT strategy and design. Trust to		Trust		0	2	3	6	Open	1
		Site investigations not instructed in sufficient time for design progress	Investigations to be identified, budgeted for and progressed to inform development		Trust		0	3	3	9	Open	1
		Interface(separation) between public, hospital and construction areas - Safety	Construction method statement and health and safety plan to be developed with		Trust		0	1	5	5	Open	1
		Client side site management and interface is not adequately defined and agreed leading to coordination and management issues	Local Trust representatives to be identified and involved in method statement		Trust		0	2	5	10	Open	1
		Site phasing and logistics not adequately defined or agreed leading to adverse impact on existing Trust activities and requests to stop work	Adequate communication plan and coordination meetings to keep effected areas	Portacabins at SMH will provide additional mitigation for these delays	Galiford Try		0	2	4	8	Open	1
		Noise, communications, site management and interface not adequately defined or resourced leading to requests to stop work	Adequate communication plan and coordination meetings to keep effected areas		Galiford Try		0	2	4	8	Open	1
		Temporary works not adequately defined	Temporary work to be designed accordingly		Galiford Try		0	2	5	10	Open	1
		Inability to achieve Breeam "Very Good" due to failure of PSCP to achieve credits owned by PSCP during pre-assessment in an affordable manner	BREEAM assessor to be appointed asap and initial assessment completed and design		Galiford Try		0	1	4	4	Open	1
		Complexity and costs of abnormals due to site constraints increases	SI to be undertaken asap		Galiford Try		0	2	3	6	Open	1
		Errors in existing as-built drwgs and information	Mitigate via surveys by PSCP		Trust		0	3	3	9	Open	1
		weather - exceeding 10 year average which impacts on the project	P21+ / NEC3 contract states weather outside of 10 year average is Trust / Client risk		Galiford Try		0	1	3	3	Open	1
		May fail to comply with utilities regulations	Engage with utility companies re diversions and design concepts		Galiford Try		0	2	4	8	Open	1
		Design not coordinated at GMP; post GMP design development	Design management required and contingency	closed at GMP, allocations included in Stage 4 GMP	Galiford Try		0	3	5	15	Open	1
		Restricted site access / logistics	Project / Logistics plan to be developed		Galiford Try		0	3	3	9	Open	1
		Unable to safely maintain existing services to other floors/departments during works	Contractor to liaise with Trust estates team to plan efficient shut-downs		Galiford Try		0	2	4	8	Open	1
		Shut downs and services diversions	Connections and requirements to be scheduled and agreed		Galiford Try		0	2	3	6	Open	1
Material long lead in periods (eg plant / equipment)	Procurement programme to be produced and reviewed within Commercial		Galiford Try		0	2	3	6	Open	1		
Site Security during construction	Contractor to establish site logistics and security plan as part of Project Management		Galiford Try		0	1	3	3	Open	1		

Count of Score												
WS#	Keyword	Title	Mitigation	Progress	Owner	Control	Probability	Impact	Score	Status	Total	
16 P21+ GThps	Design / Construction	High winds over and above 10.8/metre/second; stoppages to craneage	Review and confirm wind speed		0	Galiford Try	0	1	3	3	Open	1
		Poor ground conditions during construction discovered resulting in additional foundation works	SI to be undertaken in areas of ground works		0	Trust	0	3	5	15	Open	1
		Part L Building reg compliance - as part of obtaining renewable contribution to the 10% Part L requirement - design requires connection to site wide strategy - risk of not	Design assumes connection to Trust plant therefore Part L not achievable without		0	Trust	0	3	4	12	Open	1
		Delay to input from preferred suppliers impacts on design of interfaces	MTX, Generator etc		0	Trust	0	3	4	12	Open	1
		Access into surrounding departments adjacent main construction activities for out of sequence installations.	Adequate communication plan and coordination meetings to keep effected areas		0	Trust	0	2	3	6	Open	1
		Group 2 FF&E items handed over by Trust not suitable for incorporation into the works	Equipment strategy to review this; and adequacy of transferred items		0	Trust	0	2	3	6	Open	1
		Current design is being based on current legislative requirements and other guidance. There is no allowance contained within the capital costs to cover any design changes that	Monitor changes to legislation and guidance		0	Trust	0	1	3	3	Open	1
	Financial	Errors in GMP Pricing - incl work packages / BQ errors	Engagement of specialist health PQS for BQs.		0	Galiford Try	0	3	5	15	Open	1
		Sub-contractor Insolvency	Assessments of financial stability of s/c's		0	Galiford Try	0	3	4	12	Open	1
		Inflation in construction costs post-GMP; during Stage 4	To be included in GMP	closed at GMP submission		Galiford Try	0	3	3	9	Open	1
		Estimated project budget is insufficient to provide required levels of new accommodation	Develop design to the budget and manage expectations without compromising clinical		0	Trust	0	3	5	15	Open	1
		Preferred design exceeds budget at GMP	Ongoing cost planning and review; ongoing VE		0	Trust	0	3	5	15	Open	1
		Variations to P21+ contract may not be approved or agreed	Ensure appropriate governance in place and clarity of scope and brief so that variation		0	Trust	0	3	4	12	Open	1
		PSCP insolvency	Trust to carry out checks prior to appointment		0	Trust	0	2	5	10	Open	1
		Changes in revenue assumptions and tariff results in an the proposed capital expenditure being unaffordable	Changes in income assumptions to be managed within the affordability envelope		0	Trust	0	2	5	10	Open	1
		Change in VAT levels as project unfolds	P21+ process to be followed to agree fixed VAT reclaim		0	Trust	0	3	3	9	Open	1
		Failure to recover VAT in accordance with cost plan / OBC	Early submission and liaison with P21+ VAT Advisor		0	Trust	0	3	3	9	Open	1
		Inflation in construction costs pre-GMP	Budgets to accommodate		0	Trust	0	3	2	6	Open	1
	Existing Condition	Discovery of unknown artifacts of archaeological importance	No survey required for this site. No history of this on the site and site area partial used		0	Galiford Try	0	3	4	12	Open	1
		Cutting cables for existing services to other parts of the hospital	Surveys and risk / method statements undertaken	closed at GMP submission		Galiford Try	0	2	5	10	Open	1
		Ground Contamination	Boreholes to be taken and monitored	boreholes taken		Galiford Try	0	2	4	8	Open	1
		Risk of the current infrastructure not complying with current regulations - building regs, HBNs/HTM's	RDS and layouts developed and reviewed and derogations discussed		0	Trust	0	3	4	12	Open	1

Count of Score	WS#	Keyword	Title	Mitigation	Progress	Owner	Control	Probability	Impact	Score	Status	Total	
16 P21+ GThps	Existing Condition		Discovery of unknown asbestos and Knott Weed as works proceed, and subsequent management	PSCP to include allowance in GMP based on Management surveys - assumptions		0 Trust		0 3	4	12	Open	1	
			Additional building remedial works required	Cost plan will assume structure is in fit condition, local surveys required to confirm		0 Trust		0 3	4	12	Open	1	
			Discovery of unknown services as works proceed - not able to trace	Surveys to be done where possible		0 Trust		0 3	3	9	Open	1	
			Inadequate Infection control of existing services incl water and ductwork systems	Trust to provide existing register to designers		0 Trust		0 2	4	8	Open	1	
			Insufficient capacity available on existing services	Trust to advise strategy associated with entire building		0 Trust		0 2	4	8	Open	1	
	General		P21+ Stage 4 not in place in timely manner; leaving project on hold	P21+ Standard Framework contracts		0 Galiford Try		0 3	4	12	Open	1	
			Insufficient resources – either internal or external to support the project, resulting in slippage and increased costs	Identify worstreams, deliverables and ide		0 Galiford Try		0 2	4	8	Open	1	
			The Trust and PSCP Commercial teams fail to integrate	Ensure engagement and understanding of common goals and critical success factors and take open book		0 Trust		0 3	5	15	Open	1	
			P21+ Stage 3 not in place in timely manner; leaving project on hold	P21+ Standard Framework contracts		0 Trust		0 3	4	12	Open	1	
			Change in project team membership, resulting in loss of knowledge, and potential for key decision to be un-made and resulting in backtracking	Progress to be maintained to retain team members. Succession plan to be		0 Trust		0 2	4	8	Open	1	
	Planning		Planning conditions result in additional works/ scope to the project resulting in additional cost	Close liaison with Planners to understand potential conditions and their impact and accommodate in the		0 Trust		0 3	4	12	Open	1	
			Costs of discharging planning conditions exceed allowances	Engage with LPA to identify requirements early and make suitable allowances		0 Trust		0 3	4	12	Open	1	
	Apergillus		Risk of aspergillus to immuno compromised patients exacerbated by the impact of construction on the RSCH site. Impact on decant programme caused by delay whilst mitigations are identified.	Review of evidence from other construction sites and further testing as work on site progresses	Liaison with infection control for appropriate mitigation measures		0 Trust	0 1	5	5	Open	1	
	<b>16 P21+ GThps Total</b>												<b>81</b>
	33 Decant PSCP (LOR) 1	Insurance Claims	Insurance claims are made within LOR's policy excess limit, which flow from LOR's construction activities. Full adherence to LOR operational policies and liaison with Trust	Full adherence to LOR operational policies and liaison with Trust HLG.		0 LOR	Decant Delivery Group		2	2	4	Open	1
Trust Fire officer (TFO)		That the Trust's Fire Officer (TFO) does not sign off the project, or elements of the project, and or introduces changes to the signed-off and market tested design.	Item to be on Trust Risk Register		0 Trust	Decant Delivery Group		2	2	4	Open	1	
Trust Stakeholders		That the Trust, Trust employed contractors, specialists, clinical staff, end users, unions or any other Trust stakeholder(s) do not work within the timescales shown on the accepted programme or do not fulfil their obligations or work within the conditions stated in the Contract Works Information.	Item to be present on Trust internal risk register. Trust project manager to own.		0 Trust	Decant Delivery Group		1	2	2	Open	1	
Existing Services Contract		That the existing services / infrastructure of the hospital is insufficient to service the construction and or operation of new facilities delivered under this contract.	Item currently on Trust Risk Register. Trust Owner Phil Rolf		0 Trust	Decant Delivery Group		2	2	4	Open	1	
<b>33 Decant PSCP (LOR) 1 Total</b>												<b>4</b>	
35 Decant PSCP (LOR) 2	Design Brief	That there is a failure of the design to achieve the brief, and or, a divergence of design from the Trust's operational / design policies that were made available to LOR during Phase 3. Possibly resulting in redesign & delay.	Full LOR quality control and design inspection process to be implemented during the construction process.	Risk increased at risk review 28/09/15		LOR	Decant Delivery Group	2	3	6	Open	1	

Count of Score											
WS#	Keyword	Title	Mitigation	Progress	Owner	Control	Probability	Impact	Score	Status	Total
35 Decant PSCP (LOR) 2	Building Regulations	In full agreement with the Trust the design has been based upon 2006 Building Regulations, which has also been agreed with the BHCC building control officer. If BHCC change their position at any time there will be significant cost/delay introduced into the scheme.	Item to be present on Trust internal risk register.	Certificate awaited.	Trust	Decant Delivery Group	1	4	4	Open	1
	Breeam	The agreed BREEAM rating for the project is 'Good'. Project Manager's Correspondence 002 March 2011 confirms. Any change in requirement, and any costs or time flowing from any such change, is an Employer's risk	Item to be present on Trust internal risk register.		Trust	Decant Delivery Group	1	4	4	Open	1
	HBN/HTM	That HBN/HTM derogations and or requirements may change throughout the project - leading to additional cost and delay to programme.	Item to be present on Trust internal risk register. Trust to sign off		Trust	Decant Delivery Group	1	3	3	Open	1
	Existing Courtyard Leak	That the existing Courtyard roof leak continues and or worsens after LOR's new membrane is installed.		0	Trust	Decant Delivery Group	2	2	4	Open	1
	Movement Joints	That the existing movement joints within the Courtyard area slab require replacing / remedial works.	Design based on all record information provided by the Trust. Item to be present on		Trust	Decant Delivery Group	2	1	2	Open	1
	Drainage	That the existing site drainage requires enhancement or remedial works to receive the Phase 4 Contract Works.	Design based on all record information provided by the Trust. Item to be present on		Trust	Decant Delivery Group	1	2	2	Open	1
	Response factors (RF)	That the FCP Modular buildings failure to meet required RF factors.	Full LOR quality control and technical inspection process to be implemented during the construction process.		LOR	Decant Delivery Group	1	3	3	Open	1
	Logistics	That programme / site logistics requests are imposed by the Trust outside the agreed assumptions document and site logistics plan (CEMP) detailed within the Contract Works Information	Item to be present on Trust internal risk register. Trust Project Manager / HLG to own		Trust	Decant Delivery Group	2	2	4	Open	1
	Permits, Licences & Rights of Way	That the Trust is not able to obtain, for example but not limited to, Permits / Licences & Rights of Way to meet the timescales shown on the approved programme and Construction Management and Logistics Plan (CEMP)	Item to be present on Trust internal risk register. Trust Project Manager to own		Trust	Decant Delivery Group	1	2	2	Open	1
	Milestones / Sectional completion	That the Trust instructs changes to milestone dates / sectional completions / sequence of works / method of works to those detailed within the Contract Works Information.	Item to be present on Trust internal risk register. Trust Project Manager to own		Trust	Decant Delivery Group	1	1	1	Open	1
	Courtyard waterproofing	That the waterproofing works to the courtyard area disrupt services below the existing slab above A&E, resulting in, for example, water ingress. Consequences may be that the A&E department experiences disruption in delivery of the service. Leads to poor image and	Full LOR quality control and technical inspection process to be implemented during the construction process.		LOR	Decant Delivery Group	2	4	8	Open	1
	Damage to existing services	That services, identified on record information, are damaged by LOR during the works.	Full LOR quality control and technical inspection process to be implemented during the construction process. Trust permits obtained.		LOR	Decant Delivery Group	1	2	2	Open	1
		That services, not identified on record information, are damaged by LOR during the works.	Design based on all record information provided by the Trust. Item to be present on		Trust	Decant Delivery Group	1	2	2	Open	1
	Damage to Trust property	That Trust property is damaged by LOR plant / machines whilst in performance of their obligations to the Contract.	Full LOR quality control and technical inspection process to be implemented during the construction process. Trust permits obtained.		LOR	Decant Delivery Group	1	2	2	Open	1
Resource	Availability/cost/quality of labour, plant materials.	Use of established and known Supply Chain - careful use of Package Management protocols		LOR	Decant Delivery Group	1	2	2	Open	1	

Count of Score	WS#	Keyword	Title	Mitigation	Progress	Owner	Control	Probability	Impact	Score	Status	Total	
35 Decant PSCP (LOR) 2		Demolition	That the Trust's operational services / capability are disrupted by LOR undertaking the planned demolition on site.	Demolition method statements. Surveys and assessments informing technical design with specialist designers and	Query why this is a BSUH risk?	Trust	Decant Delivery Group	1	3	3	Open	1	
		Vandalism / security	That vandalism / damage occurs to the Works during construction	LOR to install hoarding. Security guard / cameras		0 LOR	Decant Delivery Group	2	3	6	Open	1	
		Environmental	That noise and or vibration, created by Laing O'Rourke and or their supply chain partners, while discharging their obligations under the Contract, leads to a complaint that delays, stops or changes the method of delivering the Works as stated within the Works Information.	Item to be present on Trust internal risk register. Hospital Liaison Group (HLG) project delivery manager to keep all Trust stakeholders informed of planned works. Full LOR quality control and technical inspection process to be implemented during the construction process. Trust permits obtained.		0 Trust	Decant Delivery Group	2	2	4	Open	1	
			Environmental impact during construction caused by the Works - water course contamination, discharge into public systems. Leads to additional cost and delay to clear up.	Full LOR quality control and technical inspection process to be implemented during the construction process. Trust permits obtained.		0 LOR	Decant Delivery Group	1	3	3	Open	1	
		Environmental (Noise)	That noise levels from new plant installed as part of the works is not acceptable to, for example but not limited to, end users and or	Item to be present on Trust internal risk register. Trust Project		0 Trust	Decant Delivery Group	2	2	4	Open	1	
		Insolvency	That the appointed modular contractor(s) enters Insolvency after delivery to site of the Modular building units.	LOR to undertake D&B checks on a companies before appointment. LOR procurement team to dynamically review commercial health of appointed contractors / suppliers.		0 LOR	Decant Delivery Group	1	4	4	Open	1	
		Sub-Contract Conditions	Failure to appoint subcontracts in line with the agreed GMP / Phase 4 Contract. Including but not limited to: change in prices, withdrawal of subcontractors, failure to reach agreement with Contract Conditions.	Full LOR Procurement Manager. Use of established and known supply chain - careful use of Package Management protocols		0 LOR	Decant Delivery Group	1	3	3	Open	1	
		Performance (PSCMs)	That LOR's supply chain members fail to perform due to inadequate resource, experience, competence. Resulting in delays to programme, additional cost, additional management time.	LOR to undertake a full vetting process of tenderers during the market testing process. LOR project team to manage, monitor and control performance on site.		0 LOR	Decant Delivery Group	2	4	8	Open	1	
		Performance (Consultants)	That LOR's consultants fail to perform due to inadequate resource, experience, competence. Resulting in delays to programme, additional cost, additional management time.	LOR to undertake a full vetting process of tenderers during the market testing process. LOR project team to manage, monitor and control performance on site.		0 LOR	Decant Delivery Group	2	4	8	Open	1	
		Interfaces	That there may be unforeseen interface / scope gaps within the design flowing from the Phase 3 stand down and remobilisation process.	LOR Design Manager to manage design process and identify all potential design development		0 LOR	Decant Delivery Group	4	3	12	Open	1	
		Trust equipment	That Trust supplied equipment 'Group 2,3,4' is not available in accordance with the timescales shown on the agreed programme.	Item to be present on Trust internal risk register. Trust Project	Risk increased at risk review meeting 28/09/15- equipment schedule delayed		Trust	Decant Delivery Group	2	4	8	Open	1
		Trust equipment (changes)	That the Trust changes specified equipment at Phase 4.	Item to be present on Trust internal risk register. Trust Project		0 Trust	Decant Delivery Group	1	2	2	Open	1	
		Design development	That there may be additional cost implications flowing from detailed design development at Phase 4.	LOR Design Manager to manage design process and identify all potential design development		0 LOR	Decant Delivery Group	4	3	12	Open	1	
	Inflation	Market forces, macro/ micro economic factors increase price post GMP.	LOR to place subcontracts in accordance with the approved programme		0 LOR	Decant Delivery Group	3	3	9	Open	1		
35 Decant PSCP (LOR) 2 Total												30	
Grand Total												283	

Count of Score											
WS#	Keyword	Title	Mitigation	Progress	Owner	Control	Probability	Impact	Score	Status	Total



Status	(All)
Review	(All)
Year	(All)

Count: 13

WS#	Ref	Title	Mitigation	Progress	Owner	Control	Probability	Impact	Cost	Score	Requires Attention
04 Decant - all	6	Failure to implement agreed decant plan	Regular update to 3T's Programme Board. Regular meeting to update operations team, Executives and Chiefs. Ongoing discussions with individual divisions and services.	Operational staff now engaged and a range of solutions are being worked through for the "orphans" although some double decating will now be necessary. Site Logistics Group set up to manage these issues.	DP	DDG	3	5	5	15	01/06/2013
10 Design Process 1	33	Risk of aspergillus to immuno compromised patients exacerbated by the impact of construction on the RSCH site. Impact on decant programme caused by delay whilst mitigations are identified.	Review of evidence from other construction sites and further testing as work on site progresses.	Liaison with Infection Control for appropriate mitigation measures. Also include a joint (Trust/PSCP) review of all associated construction risks, reviewing all potential hazards with agreed mitigations, for sign-off by all parties. Policy awaiting ratification in November 2015. Risk reduced following discussions. Joint Statement has been included in contract between LOR and BSUH re mitigations.	Duane Passman	Programme Board	4	5	5	20	01/06/2013
11 Trust Business Continuity	19	Site electrical Infra-structure is inadequate	Infrastructure requirements now identified and replacement timescales. NRB will provide additional capacity for electrical loads.	Allowance made in the Trust's Operational Capital programme for 2014/15 which was approved by TBoD on 31/03/14 with additional monies coming from 3Ts to cover off the Courtyard electrical loading requirements. Plans for a revised British Gas solution for energy provisions is being brought into line with 3Ts Energy Centre plans to ensure a	DP	Programme Board	4	4	4	16	01/06/2013
	22	Commissioners cannot afford scheme (changes in the size and allocation of resources for health care) which undermines FBC	Mitigating this risk would include a regular updates/commissioning interface to confirm costs and affordability as the scheme progresses. There is also a need to ensure that the scheme kept to its brief and that there are robust plans in place to ensure that BSUH's efficiency programme delivers its savings and to see if more savings can be delivered above those already identified.	Commissioning support requires further discussions and negotiations via Commissioner Oversight Forum and National Programme Board. Downside scenarios have been outlined within FBC and now require further modelling.	DP	Programme Board, Project Team, Local Health Economy Board LHE attendance	3	5	5	15	01/06/2013
12 Main Scheme Capital	1	Support with transitional costs is withdrawn	Transitional costs have been agreed with commissioners to be funded by 2% top slice. Invoice has been raised for 2014/2015 and monies received	Ongoing support with transitional costs requires confirmation as part of FBC approval process	DP/SP	Commissioner Oversight Forum and National Programme	3	5	5	15	01/06/2013
	6	Failure to sign up partner Trusts / Medical School / CCG to the brief	Work with Partners - Medical School and CCGs	Negotiations with BSMS close to fruition re financial settlement for the cost of this space.	DP	Research & Education	4	4	4	16	01/06/2013
	24	Trust do not vacate all of site in a timely manner as part of the decant leads to delay to start of construction, cost of inflation, increased duration of decant and associated costs. (Main issue is nuclear med). Additional transition costs (Revenue) (Note closed on Trust PPT - now an issue, remains here for contingency)	Joint risk mitigation meetings. ( Site Logistics Group) Mitigation includes liaison with Trust operational staff to ensure any further delays are prevented, and there is clear accountability regarding who has the authority to cease decant construction	Partial site handover is being planned in order to control impact. Query impact to be reduced in February 2016.	DP	Programme Board	5	5	5	25	01/06/2013
	30	Prudential Borrowings used as procurement route instead of Public Dividend Capital could add £15.6m to CIPs programme over next 10 years and have an adverse effect on Trust's liquidity position e.g. loan with 40 year repayment term would create an overdraft of £44m by 2022/23	Ensure borrowing is under best possible terms for BSUH	Discussions with DH have focused on the availability of Public Dividend Capital as a preference. Final mix of PDC/PBL will be a key aspect of FBC approval. Conditions of approval letter describe this in more detail and are under negotiation.	DP	Programme Board	4	4	4	16	01/06/2013
14 Design Process Main Scheme 2	53	Interfaces/impacts from other projects on site during Decant - Trust/PFI/Utilities contractors / capital works (LOR, Wilmott Dixon infrastructure, Children's hospital, audiology) - Leads to delay. (piling and ground anchors, leads to interference on other projects and start claims)	Interface planning tool required to track complexities across the site.	Initial meeting held with Estates team across BSUH to begin to track interdependencies. Development control plan in existence and regularly updated.	DP		0	4	4	16	01/06/2013
	55	There is a risk that stakeholders within the Trust are unsatisfied with the construction, demolition, excavation and any other method statements applicable causing significant delay to construction.	Identify and manage key stakeholders - clear authorisation Mitigation includes early identification of key stakeholders and formal sign off of method statements.	Various meetings held with clinical ops staff to identify and progress mitigation strategies. Clear authorisation for works on site, or any requests to cease work on site is also imperative. Preparatory work is underway on the identification of these issues and detailed work is about to start in the development of the risk and method statements; Site Logistics Group has been set up to work through these issues in more detail.	DP	MSDG	4	5	5	20	01/06/2013
16 P21+ GThps	8	Stage 3 Approvals and Contracts not implemented in time leading to delayed design deliverables	P21 Stage 3 contracts to be finalised asap and design team instructions issued. Trust to formally confirm budget in writing whilst paperwork is put in place		Trust		0	4	5	20	01/06/2013

WS#	Ref	Title	Mitigation	Progress	Owner	Control	Probability	Impact	Cost	Score	Requires Attention
21 ICT	28	Continuing alignment with Trust IM&T developments	Accept stage D+ design to avoid FBC approval delay	Process being managed as part of market testing. Stage D design accepted	G Steen	Programme Team	4	4	4	16	01/06/2013
26 Workforce Planning	2	The LTFM and 3Ts FBC assume 3% year-on-year pay cost efficiencies, and additional capacity at marginal cost (LTFM assumes 50% of tariff). Risk: the Trust will not be able to reduce its pay cost base in concert.	Mitigation: an integrated workforce development/CIPs programme has been approved by the Trust Board, and some external workforce project funding has been secured. However investment remains challenging in the context of '15/16 financial pressures.	Affordability gap between LTFM and Workforce plans as projected by bottom up review equates to a significant revenue gap. New projections will be based on a mix of bottom up calculations and benchmarking from other high-performing trusts. External support sourced to undertake workforce calculations for FBC. External support sourced to undertake workforce calculations for FBC; and the mitigation was to use speciality-specific marginal rates to calculate staffing. Workforce planning post now filled. Some pressures on timescales remain so this risk increased	Helen Weatherill/ Spencer Prosser	HMB	4	4	4	16	01/06/2013
Grand Total											

Count of WS#							
Project	Ref	Title	Comments	Owner	Target	Status	Total
<b>14 Design Process Main Scheme 2</b>	24	Use of space within preserved Chapel limited by requirement to comply with planning restrictions	Medicinema working with BSUH to utilise the space as a cinema	A Barnes	01/12/2015	Green	1
	26	Meeting held w/c 19/08/13 to review LOR proposals. Follow-up due for final agreements as part of Pre-GMP design work plan noted in H0002.	Discussions are continuing	G Speirs	01/08/2015	Green	1
	27	LOR Carrying out Acoustic Studies for ENT/ Audiology against noise and disruption concerns during, excavation, piling and construction.	Study has been carried out and results are being evaluated by LOR/BSUH	G Speirs	01/09/2015	Amber	1
	28	Helipad wind tunnel assessment review to be undertaken.	Discussions are continuing but results are positive	LoR	01/09/2015	Green	1
	H0007	Assumptions, Derogations and RDD reviews with LOR are currently on hold. Once re-instated, exceptions will be referred to Duane Passman, via DPRG.	Being reissued in March 2015 and for ongoing discussions within the programme.	Duane Passman	01/06/2015	Green	1
	H0036	Vib from excavation works within 18m of bldg. will effect scanning. Taken from item 39 on MRI matrix.	Agreed shimming co-ordination required (at Programme Team 07/08/12)	G Speirs	01/09/2015	Amber	1
	H0037	Scanning may be affected by insertion of pile casings. Consider alternative piling method. Taken from item 9 on MRI matrix.	Hammerhead provides site for mobile MRI	G Speirs	01/09/2015	Amber	1
	H0038	Risk that bored piles may exceed Siemens design criteria. Taken from Assumptions log ref 10 on MRI matrix	Hammerhead provides site for mobile MRI	G Speirs	01/09/2015	Amber	1
	H0039	Risk to existing MRI equipment in Barry bldg due to proximity of works. Taken from item 21 on MRI matrix	Hammerhead provides site for mobile MRI	G Speirs	01/09/2015	Amber	1
	H0040	Breaking out works within 22m of bldg will effect scanning. Taken from item 38 on MRI matrix	Agreed shimming co-ordination required (at Programme Team 07/08/12)	G Speirs	01/09/2015	Amber	1
<b>21 ICT</b>	1	Data centre business plan		Gary Steen	01/01/2017	Amber	1
	9	Stage D+ design (changes in technology and potential scope drift).			01/09/2015	Green	1
	H0018	Need to develop a policy on patient entertainment (e.g.. Hospedia) and IM&T/procurement implications, e.g.. would entertainment screen double as clinical screen? In process	provision to be reviewed when contract expires in accordance with design process.	Gary Steen	01/06/2016	Green	1
<b>Grand Total</b>							<b>13</b>

Count of WS#							
Project	Ref	Title	Comments	Owner	Target	Status	Total

**Brighton and Sussex University Hospitals NHS Trust  
CIP Assurance Review  
Quality Impact Assessment (QIA)**

<b>Workstream</b>	
<b>Project name:</b>	
<b>Project overview</b>	The 3Ts hospital redevelopment programme will deliver marked improvements for patients across a range of health services, replacing all of the buildings along the front of the RSCH site with two new state-of-the-art facilities. To ensure the continuity of service to patients the redevelopment will be undertaken in stages. This will allow many services to stay in situ until their new accommodation is complete, although some will have to move to temporary accommodation. Inpatient accommodation- The 3Ts project will replace and improve the inpatient accommodation offered in the Barry and Jubilee buildings. Wards in these buildings are too cramped, with only 5% of patients having individual rooms. There are too few toilets and bathrooms and a dire lack of storage for important equipment. The layout of the wards, necessitated by the building design, hampers effective nursing.

<b>Project lead</b>	Anna Barnes
<b>Executive lead</b>	Duane Passman
<b>Date completed</b>	

<b>Clinician completing QIA</b>	Stephen Drage
<b>Workforce Impact</b>	

Quality Indicator(s) and Standards (KPIs)	Standard	KPI level
	1 - Patient Experience - delivery of locally based treatment of patients and provision of comprehensive treatment regimens - % of patients receiving IMRT and IGRT therapy.	
	2 Patient Experience and Outcomes - % of patients receiving first radiotherapy treatment within 31-days (national target), and within 14 days for urgent patients e.g. head & neck cancers as per best practice.	
	3 Patient Experience and Outcomes - % of patient receiving subsequent radiotherapy treatment within 31-days (national target), and within 14 days for urgent patients e.g. head & neck cancers as per best practice.	
	4 Operational efficiency - increased throughput and productivity and increased capacity at Sussex Cancer Centre - utilisation rates - number of fractions delivered at Sussex Cancer Centre	
	5 Operational efficiency - reduction in cancellations due to unplanned downtime	

Clinical Effectiveness	Select	Score	Supporting evidence
Strong link to best practice	yes	0	See 3Ts bibliography which contains over 300 references to best practice and evidences the benefits within the Management Case (for instance the data on quicker recovery rates due to improved sleep quality, reduced patient moves and improved staff morale). The attached risks from the risk register show the read across to the 3Ts risk register which contains appropriate mitigations if some of these benefits do not materialise.
Link to best practice			
Some links to best practice			
Poor or no links to best practice			

Patient Safety	Select	Score	Supporting evidence
Safe with no risk harm		1	There have been discussions within course of the QIA about the impact of 3Ts on nursing practices because of the ergonomically designed wards and the associated efficiencies. However, 1 factor has given rise to concern within the monetised efficiencies: the impact of single rooms on patient safety (specifically risk of falls) because of reduced observations (which has meant that any monetised efficiencies been removed). This risk has been mitigated by the design of the single rooms with the provision of handrails from the bed to the en-suite bathrooms. Moreover, examples of nursing in single rooms elsewhere do not substantiate these fears. However we recognise that there is more work to do within the modernisation programme to familiarise staff with the new ward environment.
Generally safe	yes		
Pockets unsafe			
Generally unsafe			

Patient experience	Select	Score	Supporting evidence
A good patient experience	yes	1	The 3Ts development will provide a much improved patient experience in all areas of the development. We have made a small allowance of 633 square metres of floor area for private patient facilities within the new development (representing 0.68% of the total planned floor area), but not bed capacity. However there could be an increase in demand for private facilities generated by the increase in single rooms with en-suite across the development. There is scope to meet this demand which will be considered a) if there is sufficient capacity at the time and b) if no NHS patients are clinically disadvantaged. Clinical need will therefore continue to dictate which patients are admitted and will override financial considerations. Any money generated from private patients would be reinvested to directly benefit NHS patients.
Generally a good experience			
Pockets of poor experience			
Generally poor experience			

Overall risk score	Score	Mitigation to address risk, where score is above 1
	1	See above that clinical need must remain the chief reason for admission.

Review and sign-off			
	Sign off	Approve	Date
Medical Director	<i>Insert eSignature and Name</i>		
Director of Nursing	<i>Insert eSignature and Name</i>		
Comment	Please see attached templates with signatures and the letter.		

<b>QIA Check up Review</b>			
Check up date	00/00/2014	Exec Lead Approved	
Has original QIA been reviewed and score still reflective of original	Yes	Exec Lead Approval	
Are project actions as per original plan and no additional Quality, Safety or	Yes	Was this QIA re-	
Check up comments (for minor points to note)			

**Quality Impact Assessment**

Project reference	N/A	Clinical Lead	Stephen Drage
Project title	3Ts	Financial Lead	Paresh Patel
Project Manager / Programme Manager	Duane Passman (Director of 3Ts)	Business Support	Mark Frake

**Description of Scheme**

The 3Ts hospital redevelopment programme will deliver marked improvements for patients across a range of health services, replacing all of the buildings along the front of the RSCH site with two new state-of-the-art facilities. To ensure the continuity of service to patients the redevelopment will be undertaken in stages. This will allow many services to stay in situ until their new accommodation is complete, although some will have to move to temporary accommodation. Inpatient accommodation- The 3Ts project will replace and improve the inpatient accommodation offered in the Barry and Jubilee buildings. Wards in these buildings are too cramped, with only 5% of patients having individual rooms. There are too few toilets and bathrooms and a dire lack of storage for important equipment. The layout of the wards, necessitated by the building design, hampers effective nursing.

**Benefits for patients**

QIA risks

**Quality Indicators - consider Assurance Framework, KPIs**

- Patient Experience - delivery of locally based treatment of patients and provision of comprehensive treatment regimens - % of patients receiving IMRT and IGRT therapy.
- Patient Experience and Outcomes - % of patients receiving first radiotherapy treatment within 31-days (national target), and within 14 days for urgent patients e.g. head & neck cancers as per best practice.
- Patient Experience and Outcomes - % of patient receiving subsequent radiotherapy treatment within 31-days (national target), and within 14 days for urgent patients e.g. head & neck cancers as per best practice.
- Operational efficiency - increased throughput and productivity and increased capacity at Sussex Cancer Centre - utilisation rates - number of fractions delivered at Sussex Cancer Centre
- Operational efficiency - % reduction in cancellations due to unplanned downtime

Impact	1 - Insignificant; 2 - Minor; 3 - Moderate, 4 - Severe; 5 - Catastrophic.
Likelihood	1 - Almost never; 2 - Unlikely; 3 - Likely; 4 - Highly likely; 5 - Almost certain.

Description of Area of Concern / Risk	Controls in place (Mitigating actions)	Impact (1 - 5)	Likelihood (1 - 5)	Overall Rating (Impact x Likelihood)
Trust changing brief, operational policies, departmental policies through the process. Statutory requirements change brief. NHS changes over the 10 years. ( risk register ref 10/13)	Flexibility of design so building can be adapted for appropriate use over time	3	2	6
Incorrect estimated cost of maintenance/Deterioration of building fabric or M&E caused by inadequate maintenance regime. Additional cost for the Trust. (risk register ref 10/9 & 11/12)	Negotiation of contract with hard FM provider	4	3	12
3Ts building being too small (If CIPs don't deliver LOS reductions and growth is above 0.5% NE and 1% Elective then 3Ts will require additional capacity). Bed model seems to be based on 100% delivery of all assumptions (risk register ref 11/20)	Demand management strategies across health economy in partnership with commissioners	2	3	6
Response to flexibility policy not accepted. (Adapting services & building - future-proofing) Additional cost and redesign (risk register ref 10/16)	Flexibility of design so building can be adapted for appropriate use over time	3	4	12
Changes in the volume of demand for client services: Increased cost / inefficient use of resources. Change to FBC assumption (risk register ref 11/9)	Contingency to be included and sensitivities within financial model.	2	3	6
Unexpected changes in medical technology (Unexpected changes in medical technology may lead to a need to rescale or reconfigure the provision of services) (risk register ref 11/10)	Robust business plan in conjunction with commissioners.	2	3	6
Volume and case mix of activity estimated incorrectly to support services (the level of activity assumed in workforce and service planning is significantly greater than that used in the assumptions) (risk register ref 11/17)	Robust business plan in conjunction with commissioners & LTFM modelling.	2	5	10

**Quality Impact Assessment Summary**

- The development of 3Ts supports the needs of the local and regional patients.
- The new facility has got strong links to best practice and will provide treatments of the highest quality to our patients
- The service will be located in a safe working environment that carries minimal risk of harm to patients, their carers, visitors and staff.
- The unit will be operated in line with the existing policies and procedures and will be supported by experienced and competent staff.
- The unit will offer a good patient experience and deliver good patient outcomes.
- The benefits of the project will be assessed with measurable outcomes.

Approved by Clinical Director/Clinical Lead	Stephen Drage	Date	
Approved by Medical Director	Steve Holmberg	Date	
Approved by Director of Nursing	Sherree Fagge	Date	

WS#	ID	Title	Mitigation	Progress	Owner	Programme Board	Control	Probability	Impact	Score	Status	Total
12 Main Scheme Capital	24	Trust do not vacate all of site in a timely manner as part of the decant leads to delay to start of construction, cost of inflation, increased duration of decant and associated costs. (Main issue is nuclear med). Additional transition costs (Revenue) (Note closed on Trust PPT - now an issue, remains here for contingency)	Joint risk mitigation meetings. (Site Logistics Group). Mitigation includes liaison with Trust operational staff to ensure any further delays are prevented, and there is clear accountability regarding who has the authority to cease decant construction	Partial site handover is being planned in order to control impact. Query impact to be reduced in February 2016.	DP			5	5	25	Open	1
10 Design Process 1	84	Risk of aspergillus to immuno compromised patients exacerbated by the impact of construction on the RSCH site. Impact on decant programme caused by delay whilst mitigations are identified.	Review of evidence from other construction sites and further testing as work on site progresses.	Liaison with Infection Control for appropriate mitigation measures. Also include a joint (Trust/PSCP) review of all associated construction risks, reviewing all potential hazards with agreed mitigations, for sign-off by all parties. Policy awaiting ratification in November 2015. Risk reduced following discussions. Joint Statement has been included in contract between LOR and BSUH re mitigations.	Duane Passman			4	5	20	Open	1
11 Trust Business Continuity	23	Failure to pay contractor on time	Mitigation includes setting up a purchase order, and ring fencing 3Ts budget for use exclusively by 3Ts		0 DP			4	5	20	Open	1
14 Design Process Main Scheme 2	55	There is a risk that stakeholders within the Trust are unsatisfied with the construction, demolition, excavation and any other method statements applicable causing significant delay to construction.	Identify and manage key stakeholders - clear authorisation Mitigation includes early identification of key stakeholders and formal sign off of method statements.	Various meetings held with clinical ops staff to identify and progress mitigation strategies. Clear authorisation for works on site, or any requests to cease work on site is also imperative. Preparatory work is underway on the identification of these issues and detailed work is about to start in the development of the risk and method statements; Site Logistics Group has been set up to work through these issues in more detail.	DP			4	5	20	Open	1
16 P21+ GTs	8	Stage 3 Approvals and Contracts not implemented in time leading to delayed design deliverables	P21 Stage 3 contracts to be finalised asap and design team instructions issued. Trust to formally confirm budget in writing whilst paperwork is put in place		0 Trust			4	5	20	Open	1
11 Trust Business Continuity	19	Site electrical Infra-structure is inadequate	Infrastructure requirements now identified and replacement timescales. NRB will provide additional capacity for electrical loads.	Allowance made in the Trust's Operational Capital programme for 2014/15 which was approved by TBoD on 31/03/14 with additional monies coming from 3Ts to cover off the Courtyard electrical loading requirements. Plans for a revised British Gas solution for energy provisions is being brought into line with 3Ts Energy Centre plans to ensure a smooth transition through the work phases.	DP			4	4	16	Open	1
12 Main Scheme Capital	6	Failure to sign up partner Trusts / Medical School / ICG to the brief	Work with Partners - Medical School and CCGs	Negotiations with BSMS close to fruition re financial settlement for the cost of this space.	DP			4	4	16	Open	1
12 Main Scheme Capital	30	Prudential Borrowings used as procurement route instead of Public Dividend Capital could add £15.6m. to CIPs programme over next 10 years and have an adverse effect on Trust's liquidity position e.g. loan with 40 year repayment term would create an overdraft of £44m by 2022/23	Ensure borrowing is under best possible terms for BSUH	Discussions with DH have focused on the availability of Public Dividend Capital as a preference. Final mix of PDC/PBL will be a key aspect of FBC approval. Conditions of approval letter describe this in more detail and are under negotiation.	DP			4	4	16	Open	1
14 Design Process Main Scheme 2	53	Interfaces/impacts from other projects on site during Decant - Trust/P/Utilities contractors / capital works (LOR, Willmott Dixon infrastructure, Children's hospital, audiology) - Leads to delay, piling and ground anchors, leads to interference on other projects and start claims	Interface planning tool required to track complexities across the site.	Initial meeting held with Estates team across BSUH to begin to track interdependencies. Development control plan in existence and regularly updated.	DP			4	4	16	Open	1
14 Design Process Main Scheme 2	12	80 temporary car parking spaces will need to be provided during the construction period away from the RSCH site. Discussions with the council have yet to yield a satisfactory outcome for this issue.	The council are now engaged in working with us to secure a resolution including possible off site parking. DP to continue discussions as 3G has now left BSUH.	DP in discussions with B&HCC re relocation of SMH tennis courts and provision of additional parking there.	DP			4	4	16	Open	1
26 Workforce Planning / CT	28	Continuing alignment with Trust IM&T developments	Accept stage D+ design to avoid FBC approval delay	Process being managed as part of market testing. Stage D design accepted	G Steen			4	4	16	Open	1
26 Workforce Planning / CT	2	The LTFM and 3Ts FBC assume 3% year-on-year pay cost efficiencies, and additional capacity at marginal cost (LTFM assumes 50% of tariff). Risk: the Trust will not be able to reduce its pay cost base in concert.	Mitigation: an integrated workforce development/CIPs programme has been approved by the Trust Board, and some external workforce project funding has been secured. However investment remains challenging in the context of 15/16 financial pressures.	Affordability gap between LTFM and Workforce plans as projected by bottom up review equates to a significant revenue gap. New projections will be based on a mix of bottom up calculations and benchmarking from other high-performing trusts. External support sourced to undertake workforce calculations for FBC. External support sourced to undertake workforce calculations for FBC, and the mitigation was to use speciality-specific marginal rates to calculate staffing. Workforce planning post now filled. Some pressures on timescales remain so this risk increased	Helen Weatherill/ Spencer Prosser			4	4	16	Open	1
04 Decant - all	6	Failure to implement agreed decant plan	Regular update to 3T's Programme Board. Regular meeting to update operations team, Executives and Chief's. Ongoing discussions with individual divisions and services.	Operational staff now engaged and a range of solutions are being worked through for the 'orphans' although some double decanting will now be necessary. Site Logistics Group set up to manage these issues.	DP			3	5	15	Open	1
11 Trust Business Continuity	22	Commissioners cannot afford scheme (changes in the size and allocation of resources for health care) which undermines FBC	Mitigating this risk would include a regular updates/commissioning interface to confirm costs and affordability as the scheme progresses. There is also a need to ensure that the scheme kept to its brief and that there are robust plans in place to ensure that BSUH's efficiency programme delivers its savings and to see if more savings can be delivered above those already identified.	Commissioning support requires further discussions and negotiations via Commissioner Oversight Forum and National Programme Board. Downside scenarios have been outlined within FBC and now require further modelling.	DP			3	5	15	Open	1
11 Trust Business Continuity	13	Unclear requirements from NHS England a for instance changes to NHS Outcomes Framework.	Gain certainty from CCG and partner organisations e.g. NHS England Area Team.	Ongoing dialogue with CCGs. Commissioner Oversight Forum has been established as well as National Programme Board.	DP			5	3	15	Open	1
12 Main Scheme Capital	1	Support with transitional costs is withdrawn	Transitional costs have been agreed with commissioners to be funded by 2% top slice. Invoice has been raised for 2014/2015 and monies received	Ongoing support with transitional costs requires confirmation as part of FBC approval process	DP/PSP			3	5	15	Open	1
14 Design Process Main Scheme 2	10	Vibration disruption to linacs during construction of stage 1	Investigations have been undertaken to determine impact. WSP report has been reviewed and the methodology has been outlined for Trust to decide on relocation or additional measures. Review what the agreed level is (statutory limits)	Workshop held 10th April. Notes issued April 14th Trust subsequently provided with Royal London acoustic solution details, with the following response (and current holding position) received: As discussed at our meeting on 10th April 2015, we will be undertaking the recommendations of the 3 reports produced by WSP: Assessment of Potential Vibration Impacts on Sensitive Equipment within the LINAC Bunkers, Barry Building and the Front Car Park Modular Units, which also references BS5228. By following the recommendations from the well-researched reports and using modern, well maintained noise-efficient and silenced plant, we are confident that the noise and vibration can be controlled and maintained at acceptable levels. We would not anticipate utilising the level of acoustic shielding used at Royal London Hospital, which is not included in the current cost plan. Comms plan required to communicate mitigation strategy with staff.	DP			3	5	15	Open	1
14 Design Process Main Scheme 2	28	Sign off not achieved to programme dates. 150 non-standard rooms. Additional comments provided after programme sign off date. Leads to increased time and cost of design and construction.	Clear programme management	On programme	DP			3	5	15	Open	1

16 P21 P21	7	Proposal for BREEM Very good not accepted by planners	Clear statement required pre agreement to be sought from planners as part of early consultation process		0 Trust		0	3	5	15	Open	1
16 P21 P21	11	Statutory approvals not received	Early identification of Statutory bodies that need to provide approval required		0 Trust		0	3	5	15	Open	1
16 P21 P21	26	Design team unable to meet the required timescales to deliver rbc and gmp.	Ensure resources identified, deliverables and programme defined and budgets confirmed and agreed to meet key deadlines	closed at GMP submission	Galiford Try		0	3	5	15	Open	1
16 P21 P21	30	Programme benefits from using modular construction do not materialise	Meet with suppliers to validate programme assumptions and seek references		0 Trust		0	3	5	15	Open	1
16 P21 P21	52	Design not coordinated at GMP; post GMP design development	Design management required and contingency	closed at GMP, allocations included in Stage 4 GMP	Galiford Try		0	3	5	15	Open	1
16 P21 P21	51	Poor ground conditions during construction discovered resulting in additional foundation works	SI to be undertaken in areas of ground works		0 Trust		0	3	5	15	Open	1
16 P21 P21	76	Errors in GMP Pricing - incl work packages / BQ errors	Engagement of specialist health POS for BQs.		0 Galiford Try		0	3	5	15	Open	1
16 P21 P21	66	Estimated project budget is insufficient to provide required levels of new accommodation	Develop design to the budget and manage expectations without compromising clinical effectiveness of final design		0 Trust		0	3	5	15	Open	1
16 P21 P21	73	Preferred design exceeds budget at GMP	Ongoing cost planning and review; ongoing VE		0 Trust		0	3	5	15	Open	1
16 P21 P21	83	The Trust and PSCP Commercial teams fail to integrate	Ensure engagement and understanding of common goals and critical success factors and take open book approach		0 Trust		0	3	5	15	Open	1
04 Decant - all	9	Failure to maintain all services whilst they are decanted is a business continuity risk	Regular update to 3T's programme Board. Regular meeting to update Operations Team, Executives and Chief's. Ops Team involved in Decant Delivery Group to ensure minimal/no impact on business continuity.	Mitigation includes detailed operational commissioning plans to be developed.	DP	Decant Delivery Group	0	3	4	12	Open	1
04 Decant - all	6	Increase in design and works cost because of lack of drawn up SOA	SoA issued and 1:100 GA produced, so risk now more about change in brief.		0 RSB	Decant Delivery Group	0	3	4	12	Open	1
10 Design Process 1	16	Response to flexibility policy not accepted. (Adapting services & building - future-proofing) Additional cost and redesign (1.06)		0 On programme. LOR to respond to BSUH.			0	3	4	12	Open	1
10 Design Process 1	20	Warrantees to the adjacent SPV for the children's hospital..	Negotiation with Kajima	Information on ground anchors has been provided	DP	Programme Board	0	3	4	12	Open	1
10 Design Process 1	10	The Employer instructs the cessation of construction activities that are being carried out within the noise, vibration and dust levels defined in the Works Information.	Check control measures allowed for in GMP (some booths move into the annex). Review report from WSP on ENT building - adjust values if necessary	On programme	DP	Programme Board	0	4	3	12	Open	1
10 Design Process 1	11	A statutory authority and/or utility provider does not work within the times shown on the Accepted Programme	Trust to consider letting an enabling works contract separately and early Check Stat Auth works in Main Scheme, timescales and who will be placing orders. PR to liaise with LOR.	On programme	DP/PR	Programme Board	0	3	4	12	Open	1
11 Trust Business Continuity	12	Incorrect estimated cost of maintenance	Contingency to be included	Maintenance costs in FBC benchmarked within expected range of peer group.	DP		0	4	3	12	Open	1
11 Trust Business Continuity	14	Reconfiguration of local Health Economy/ CCGs priorities and impact of required efficiencies	Ensure strategic fit with emerging commissioner priorities.	Dialogue with commissioners and TDA is positive. Mitigations to the construction programme are being worked through and discussed with commissioners.	DP	LHC SEC	0	3	4	12	Open	1
11 Trust Business Continuity	16	Adverse impact of needs of other CCG funded projects	Build in contingency. Liaison with other projects	BSUH fully engaged in whole health economy planning.	DP		0	3	4	12	Open	1
11 Trust Business Continuity	11	Changes in commissioning intentions re activity/repatriation.	Dialogue across the Sussex Cancer Network & with commissioners	Risk increased because of national changes to clinical networks which may affect the service configuration	DP	Programme Board	0	3	4	12	Open	1
11 Trust Business Continuity	15	Adverse impact of needs of other Trust projects such as site reconfiguration or Clinical Strategy.	Build in contingency and sensitivity within financial model	Programme management strategies have been adopted across 3Ts & Estates /Facilities	DP	Programme Board	0	4	3	12	Open	1
12 Main Scheme Capital	16	Response to flexibility policy not accepted. (Adapting services & building - future-proofing) Additional cost and redesign (1.06)		0	0 DP	Programme Board	0	3	4	12	Open	1
12 Main Scheme Capital	4	Capital Costs / Equipment	Draw up accurate equipment list on agreed 1:50s	Additional procurement resource now available	DP	Programme Board	0	3	4	12	Open	1
12 Main Scheme Capital	8	Associated or adjacent projects insufficiently joined up	Ensure Trust provides overview strategy and control and co-ordination across projects	Increased complexity of diverse capital projects across RSCH reflected by this rating. Portfolio management being discussed via work being undertaken by J Nerney.	DP	Development of interim strategy	0	3	4	12	Open	1
12 Main Scheme Capital	9	Estimated income from income generating schemes is incorrect	Contingency to be included and sensitivities within financial model. Appropriate marking required	FBC activity modelling is in process.	DP	Programme Board, Local Health Economy Board, LHC attendance	0	3	4	12	Open	1
12 Main Scheme Capital	13	Change in requirements of the NHS trust. The NHS trust may require changes to the design, leading to additional design and construction costs. FBC delay or reduced efficiency.	Keep change register and issues log fully up to date.	Robust change policy in place for design process	DP	Programme Board	0	3	4	12	Open	1
14 Design Process 2	7	Failure to translate operational policies into design	Robust FBC process incl design briefs & generation of ADB sheets in conjunction with users	User involvement via 1:200 and 1:50 processes required to mitigate this risk.	DP	Programme Board	0	4	3	12	Open	1
14 Design Process 2	19	Status and risk of future changes with Building Regs and Building Control. (3.2.3)	Determine what building regs will apply and when the building regs application is submitted	LOR to advise	DP	MSDC	0	4	3	12	Open	1
14 Design Process 2	8	Failure to design to brief (3.02)	Manage Architects and end users. Ensure design requirements are explicit within brief	Robust change process in place (stage D/Stage E processes).	Gary Speirs	MSDC	0	3	4	12	Open	1
14 Design Process 2	40	Construction Inflation increasing beyond estimation in FBC after the initial 2 years. Excludes VAT. Leads to increased cost outside GMP.	INFLATION RISK IS ACCOUNTED FOR OUTSIDE THE RISK REGISTER After initial 2 years - agree packages fixed for another 2 years. Or review at stages	Construction inflation fixed for Stage 1. Stages 2 and 3 subject to a review process.	DP	MSDC	0	4	3	12	Open	1
21 ICT	29	Inadequate funds for IM&T requirements inadequate funds for IM&T density requirements	The mitigation includes identifying the IM&T requirements throughout each planning stage and iteration		0 G Steen	Programme Board	0	4	3	12	Open	1
24 Stakeholder support	20	Impact of construction. There is a risk that stakeholders outside the Trust are unsatisfied with the construction, demolition, excavation and any other methodologies applicable for the delivery of the works as described in the Method Statements.	Identify and manage key stakeholders including local residents. Clear lines of communication with local residents and other key stakeholders. Adherence to CEMP		0 R Beard		0	3	4	12	Open	1
24 Stakeholder support	5	Planning submission and interplay with local stakeholders re traffic	Increased liaison with B&HCC		0 DP		0	3	4	12	Open	1
26 Workforce Planning	4	Operational policies for 3Ts may not have been developed in sufficient detail to enable workforce implications to be identified. The impact of new physical designs of workforce requirements/costs (eg significant increase in spacing/distances, and in particular proportion of single inpatient rooms) may have been underestimated.	Robust FBC process incl design briefs & generation of ADB sheets in conjunction with users. There are ongoing discussions about Trust-wide Workforce Plans (closing the LTM Workforce Plan CIPs gap, three-year rolling CIPs plans for workforce which will be summarised in a single PID)	PB discussion regarding difficulty in progressing this workstream raised this risk		Programme Team	0	4	3	12	Open	1
26 Workforce Planning	5	3Ts significantly increases capacity in some of the harder-to-recruit specialties (eg general- and neuro-Critical Care). The Trust-wide Recruitment & Retention and workforce development strategies may not bridge this gap (sufficiently, or in time) eg difficulty in recruiting to assistant practitioner role as specified within 3Ts workforce plans	Role redesign may be required	the Trust's education commissioning requirements for the academic year 2013/2014 have been submitted. This includes increases in commission numbers for both Diagnostic and Therapeutic Radiography and also for entrants on to the Scientist Training Programme in Medical Physics. The Trust has also set out a plan to reinstate secondment commissions for the nursing and midwifery programmes at the University of Brighton. PT discussion regarding difficulty in funding this workstream raised this risk			0	4	3	12	Open	1
32 Main Scheme Equipment	1	Access routes and weight loadings for large equipment.	Under review with LOR and key equipment suppliers to quantify.		0 DVJM		0	3	4	12	Open	1
32 Main Scheme Equipment	2	Time and resource limitation	Lock to identify when additional resource is likely to be needed, and how this could be effectively commissioned and financed. Escalate as necessary. Outsource to MTS if necessary.	Staff now in place so risk reduced.	DV		0	3	4	12	Open	1
32 Main Scheme Equipment	6	Delay to equipment delivery (Group 2, 3) and installation (Group 3, 4). Minor quantity of transferred kit. Caused by Trust delays. Leads to programme delays in construction and / or operational commissioning	Set up monitoring processes to track progress with selection, ordering and delivery of equipment.		0		0	3	4	12	Open	1
34 Main Scheme Delivery	1	Third party insurance claims (Public Liability) on adjacent properties (Children's hospital, neighbours) caused by construction. Cost may be covered with insurance apart from the excess amount.	Design Temporary works and perm works. Monitor throughout, minimise movement. LOR have confirmed this is insured. £10k excess each party. £25k excess for works. Surveys to adjacent properties carried out in advance	Movement monitoring measures in place and risk control measures have been introduced. Will need regular review.	PSCP		0	4	3	12	Open	1



16 P21+ GT/ps		2	Reputational damage (internally and externally) through poor communication, lack of benefits realisation, not meeting programme	Benefits realisation being reviewed through FBC process and risk and benefits meeting to be arranged. Programme critical to 3T's project + reputation, deliverables need active management and expectations need to be managed.	0	Trust		0	3	4	12	Open	1	
16 P21+ GT/ps				Stakeholder list to be reviewed to ensure completeness	0	Trust		0	3	4	12	Open	1	
16 P21+ GT/ps		53	Part L Building reg compliance - as part of obtaining renewable contribution to the 10% Part L requirement - design requires connection to site wide strategy - risk of not obtaining Part L approval due to this failure	Design assumes connection to Trust plant therefore Part L not achievable without reliance on Trust plant. Steam, IT and Water are being picked up from the Trust. Model and initial calculations completed and Part L and BREEM Very good achievable with LED Lighting provision?	0	Trust		0	3	4	12	Open	1	
16 P21+ GT/ps		56	Delay to input from preferred suppliers impacts on design of interfaces	MTX, Generator etc	0	Trust		0	3	4	12	Open	1	
16 P21+ GT/ps		71	Sub-contractor Insolvency	Assessments of financial stability of s/c's	0	Galiford Try		0	3	4	12	Open	1	
16 P21+ GT/ps		77	Variations to P21+ contract may not be approved or agreed	Ensure appropriate governance in place and clarity of scope and brief so that variation are clear. Work together to clearly define changes in scope and impact.	0	Trust		0	3	4	12	Open	1	
16 P21+ GT/ps		59	Discovery of unknown artifacts of archaeological importance	No survey required for this site. No history of this on the site and site area partial used during Trust's Phase 1 development in the 1990's	0	Galiford Try		0	3	4	12	Open	1	
16 P21+ GT/ps		57	Risk of the current infrastructure not complying with current regulations - building regs. HBN's/HM's	RDS and layouts developed and reviewed and derogations discussed	0	Trust		0	3	4	12	Open	1	
16 P21+ GT/ps		58	Discovery of unknown asbestos and Knott Weed as works proceed, and subsequent management	PSCP to include allowance in GMP based on Management surveys - assumptions. This risk is for additional unknown asbestos - exceeding allowance.	0	Trust		0	3	4	12	Open	1	
16 P21+ GT/ps		61	Additional building remedial works required	Cost plan will assume structure is in fit condition, local surveys required to confirm scope	0	Trust		0	3	4	12	Open	1	
16 P21+ GT/ps		81	P21+ Stage 4 not in place in timely manner; leaving project on hold	P21+ Standard Framework contracts used	0	Galiford Try		0	3	4	12	Open	1	
16 P21+ GT/ps		80	P21+ Stage 3 not in place in timely manner; leaving project on hold	P21+ Standard Framework contracts used	0	Trust		0	3	4	12	Open	1	
16 P21+ GT/ps		85	Planning conditions result in additional works / scope to the project resulting in additional cost	Close liaison with Planners to understand potential conditions and their impact and accommodate in the design	0	Trust		0	3	4	12	Open	1	
16 P21+ GT/ps		92	Costs of discharging planning conditions exceed allowances	Engage with LPA to identify requirements early and make suitable allowances	0	Trust		0	3	4	12	Open	1	
35 Decant (LOR) 2		45	That there may be unforeseen interface / scope gaps within the design flowing from the Phase 3 stand down and remedialisation process.	LOR Design Manager to manage design process and identify all potential design development issues.	0	LOR	Decant Delivery Group	0	4	3	12	Open	1	
35 Decant (LOR) 2		49	That there may be additional cost implications flowing from detailed design development at Phase 4.	LOR Design Manager to manage design process and identify all potential design development issues.	0	LOR	Decant Delivery Group	0	4	3	12	Open	1	
08 Decant AP/AB/N		8	Risk of aspergillus to immuno compromised patients exacerbated by the impact of construction on the RSCH site. Impact on decant programme caused by delay whilst mitigations are identified.	Review of evidence from other construction sites and further testing as work on site progresses.		Duane Passman	Decant Delivery Group	0	2	5	10	Open	1	
11 Trust Business Continuity		17	Volume and case mix of activity estimated incorrectly to support services	Robust business plan in conjunction with commissioners & LTFM modelling has taken place.		DP	Programme Board, Project Team, Local Health Economy Board/LHE alternatives	0	2	5	10	Open	1	
11 Trust Business Continuity		21	Commissioning process halted by major incident	Make pre-arrangements with surrounding / London Trusts to cover any Major Incident if our operational capacity is compromised due to commissioning process.		0	DP	Design Team	0	2	5	10	Open	1
11 Trust Business Continuity		18	Overall Affordability - revenue. BSUH has to make savings of £173m (including Pathology and EPR) between 2013/14 and 2021/22 and 3Ts added £15.6m to this (down from £30m). There is therefore an overall risk on affordability.	Enabled growth as envisaged by LTFM will reduce affordability gap. 3Ts will facilitate this growth and repatriation.		DP	Programme Board	0	2	5	10	Open	1	
12 Main Scheme Capital		29	HMT requirement to significantly reduce size and scope of scheme	Provide full justification of building size and scope to HMT		DP	Programme Board	0	2	5	10	Open	1	
12 Main Scheme Capital		27	Introduction of Private Finance 2 (PF2)	Delays may be less than previous PFI (circa 18 months rather than 3-4 years)		DP	Programme Board	0	2	5	10	Open	1	
14 Design Process Main Scheme 2		9	Asbestos and contamination - unknown extent of asbestos and contamination in existing buildings. (No allowance made in GMP for removal). Asbestos surveys are costed and programmed in the GMP. LOR cannot have access to these areas until Trust handover the building.	In Nov 14 - asbestos surveys update carried out and passed to LOR		DP	MSDC	0	5	2	10	Open	1	
14 Design Process Main Scheme 2		23	Construction delayed by RFAs inspection and/or non availability of BSUH RPA. Limited specialist resources available. Delay to programme to be compliant (4.20)	LOR will provide construction programme, which identifies when RPA access to the site will be required. Trust will then review the proposed plan at each identified point, identify how long testing would be expected to take and source RPA			MSDC	0	2	5	10	Open	1	
16 P21+ GT/ps		3	GMP is not within delegated approval limits	Early cost plan to identify cost pressures and manage scheme within defined budgets		Trust		0	2	5	10	Open	1	
16 P21+ GT/ps		5	Additional approvals are required by Trust Board which would delay approval	Project Director to report regularly to Trust Board and highlight any movement from current approvals		Trust		0	2	5	10	Open	1	
16 P21+ GT/ps		4	GMP not approved by 3Ts Programme Board	Engagement with Project Board through GMP development		Trust		0	2	5	10	Open	1	
16 P21+ GT/ps		12	Scope of project changes and difficult to fix brief	Design team to work closely with project team to reflect user requirements		0	Trust		0	2	5	10	Open	1
16 P21+ GT/ps		14	Trust stakeholders not carried along with the project development process, resulting dissent and need for late revision in scope, and/or project not meeting required outcomes	Key stakeholders to be identified and engaged		0	Trust		0	2	5	10	Open	1
16 P21+ GT/ps		15	Final design and layouts not functional for activity	Care to be taken to ensure designs meet staff needs and derogations are understood and do not compromise accommodation requirements		0	Trust		0	2	5	10	Open	1
16 P21+ GT/ps		21	End User disappointment with accommodation	Stakeholder involvement in developing designs		0	Trust		0	2	5	10	Open	1
16 P21+ GT/ps		36	Client site management and interface is not adequately defined and agreed leading to coordination and management issues	Local Trust representatives to be identified and involved in method statement and site coordination		0	Trust		0	2	5	10	Open	1
16 P21+ GT/ps		39	Temporary works not adequately defined	Temporary work to be designed accordingly		0	Galiford Try		0	2	5	10	Open	1
16 P21+ GT/ps		72	PSCP insolvency	Trust to carry out checks prior to appointment		0	Trust		0	2	5	10	Open	1
16 P21+ GT/ps		74	Changes in revenue assumptions and tariff results in an the proposed capital expenditure being unaffordable	Changes in income assumptions to be managed within the affordability envelope		0	Trust		0	2	5	10	Open	1
16 P21+ GT/ps		64	Cutting cables for existing services to other parts of the hospital	Surveys and risk / method statements undertaken		0	Galiford Try		0	2	5	10	Open	1
10 Design Process 1		2	Discovery of any contamination, soft ground, services, obstructions, archaeology, unexploded ordnance, swallow holes or radioactive materials in areas where the Contractor has been unable to survey as at the date of 17 July 2015. This includes areas under existing buildings, car parking and roads.	More soil sampling and testing to be undertaken following experience of Decant programme.		DP	Programme Board	0	3	3	9	Open	1	
10 Design Process 1		6	Any of the existing retained services are not adequate, in relation to condition, location and performance, such that the Contractor can not connect to without the need to upgrade or replace the existing service.	Additional work may be needed to remedy		DP	Programme Board	0	3	3	9	Open	1	
10 Design Process 1		7	Service diversions in enabling works	Service diversions in enabling works		DP	Programme Board	0	3	3	9	Open	1	
12 Main Scheme Capital		2	Legislative/regulatory change having capital cost consequences. NHS specific	Communication with authorities for early warning		DP	Programme Board	0	3	3	9	Open	1	
12 Main Scheme Capital		10	Changed DH priorities influences scheme. Department of Health imposes terms outside of the P21 framework, leads to reduced return for LOR (2.05)	Communication with TDA and commissioners on on-going basis. Regular briefings to CIC.		DP	Programme Board	0	3	3	9	Open	1	

14 Design Process Main Scheme 2	5	Failure to achieve AEDET	Robust FBC process incl design briefs & generation of ADB sheets in conjunction with users	AEDET will need to be refreshed for the new design.	DP											3	3	9	Open	1	
14 Design Process Main Scheme 2	33	Design of Helipad (inc Weather protection - stainless steel screens). Leads to redesign. (3.54)	Clarify to client requirements	On programme	DP												3	3	9	Open	1
14 Design Process Main Scheme 2	11	Construction works are stopped or disrupted in the Thomas Kemp Tower (TKT) due to noise or vibration from either the Helipad works or other works associated with the TKT. Accepting that noise and/or vibration levels are to be within the limits identified in the Works Information..	Reference HIA report for mitigation strategy. LOR have received report and have produced a strategy of mitigation measures  Isolate babies in ward from the works. Trust to find out seasonality of babies (September) – determine quietest times for TMBU – clear out cot rooms and carry out a test drill to get acoustic reading 60DBA per something...(guidance says 40DBA) Current status is 65-70DBA	Level 15 drilling, to test the impact on TMBU: The test works carried out on 31/03/15 showed that the diamond drilling method caused little to no sound or vibration within the clinical areas, and as such posed no concern to either patients, visitors or staff.  Percussive drilling was found to be minimally invasive and the clinical lead explained that this could be disruptive to staff and in turn patients, should it be for extended periods of time. As the requirement for percussive drilling is limited to short bursts it is felt that this can be planned in a manner that creates little disruption.  Next steps: - GB to take the official SRL acoustician report to the TMBU senior management meeting in early June (due to leave) to discuss the findings and gather further feedback. - LOR to arrange a visit with GB to the Hillt centre to assess the sound and vibration levels of the sawing device which will be used in the south-east corner of the TKT for the trauma lift works.  Level 15 drilling at the proposed major trauma location: A test of percussive drilling was carried out in the south-east corner of the TKT and sound and vibration were measured both at the source and at various points within the closest clinical area. With lobby doors closed there was no detection of either sound or vibration in the clinical areas, confirming there was no concern to patients.	DP												3	3	9	Open	1
14 Design Process Main Scheme 2	54	Final connections into Trust infrastructure proves inadequate. This will result in additional work to remove or repair to enable linking to be carried out.	Additional work may be needed to remedy	Most service diversions works are carried out early on	DP												3	3	9	Open	1
18 Engagement Staff	4	Loss of staff due to changes/disruptions/relocations	HR Strategy	A commissioning and business continuity plan has been drafted as part of the FBC.	DP												3	3	9	Open	1
21 ICT	26	Lack of funding for replacement of IP Telephony	Should this continue over future financial years then either alternative funding will be required to meet the objective of having a flexible network based telephony system or plan for the re-provision and relocation of legacy telephony equipment and the associated space requirements.	Going to IPG in March in March 2015.	G Steen												3	3	9	Open	1
31 Decant Equipment	6	Trust supplied equipment Front Car Park Groups 2.3, 4 is delayed. Information delayed or equipment delayed. Potential delay to opening and Decant programme and additional cost	Full equipment schedules now developed.	Full equipment schedules now developed.	RSB												3	3	9	Open	1
34 Main Scheme P21 Delivery	6	Unforeseen ground conditions on areas which LOR have free open access i.e. no above ground structures. Includes contamination, soft ground, services, obstructions (archaeology, UXO), swallow holes, radioactive materials. Leads to extra time and cost	Sl of available ground has been carried out. Revisit surveys to identify any additions	Risk re-opened following FBC review. Surveys to be continued as required.	PSCP												3	3	9	Open	1
34 Main Scheme P21 Delivery	56	Failure to obtain Building Control sign off. Leads to delay to programme, additional cost.	Continued engagement with certifier and progressive sign off.	Risk transferred to BSUH .see Main scheme 14/19.	PSCP												3	3	9	Open	1
34 Main Scheme P21 Delivery	70	Downtime for cranes is greater than allowed for in the programme in GMP. Caused by being winding off. Winding off of Craneage held as an LOR risk up to the 10 year event threshold as set out in the Compensation Event Process.	Allowances made 15% for six cranes		0 PSCP												3	3	9	Open	1
34 Main Scheme P21 Delivery	89	Discharge of Planning conditions – LOR. Unable to discharge planning conditions owned by LOR which increases costs/resources/programme. Caused by delay in design or change in Planning perception	Get agreement from Planners early.	Get agreement from Planners early. Re-opened following LOR review for FBC	PSCP												3	3	9	Open	1
34 Main Scheme P21 Delivery	91	There is a risk that there the CDM H&S risks (see CDM register) are not designed out resulting in buildability issues (LOR) or operational or methodology costs (Trust REVENUE cost). Note changes to legislation in 2015.		0 Risk raised at GMP workshop July 2015 . Requires ongoing monitoring and management.	PSCP												3	3	9	Open	1
16 P21+ GT/ps	20	Risk of changing requirements and design sign-off by user groups - Security, infection control, IT, Fire officer, laundry, cleaning etc.	Trust to coordinate stakeholder internally to ensure no changes to signed off design. Meetings with representatives to be arranged		0 Trust												3	3	9	Open	1
16 P21+ GT/ps	28	Design deliverables for GMP not adequately defined leading to gaps in information required, lack of pricing certainty and risk	Design team deliverables to be clearly defined and liaise with the Trust team		0 Trust												3	3	9	Open	1
16 P21+ GT/ps	29	Timescales for design development do not allow for adequate consultation and interim sign off of developing proposals leading to reworking, abortive costs and/or delays	Trust to be involved in design development meetings where required and ensure that sufficient liaison and review meetings take place to finalise works information		0 Trust												3	3	9	Open	1
16 P21+ GT/ps	33	Site investigations not instructed in sufficient time for design progress	Investigations to be identified, budgeted for and progressed to inform developing design and costs		0 Trust												3	3	9	Open	1
16 P21+ GT/ps	42	Errors in existing as-built dwgs and information	Mitigate via surveys by PSCP		0 Trust												3	3	9	Open	1
16 P21+ GT/ps	55	Restricted site access / logistics	Project / Logistics plan to be developed		0 Galiford Try												3	3	9	Open	1
16 P21+ GT/ps	68	Inflation in construction costs post-GMP; during Stage 4	To be included in GMP	closed at GMP submission	Galiford Try												3	3	9	Open	1
16 P21+ GT/ps	69	Change in VAT levels as project unfolds	P21+ process to be followed to agree fixed VAT reclaim		0 Trust												3	3	9	Open	1
16 P21+ GT/ps	70	Failure to recover VAT in accordance with cost plan / OBC	Early submission and liaison with P21+ VAT Advisor		0 Trust												3	3	9	Open	1
16 P21+ GT/ps	82	Discovery of unknown services as works proceed - not able to trace	Surveys to be done where possible		0 Trust												3	3	9	Open	1
36 Decant PSCP (LOR)	50	Market forces, macro/ micro economic factors increase price post GMP.	LOR to place subcontracts in accordance with the approved programme and price risk within GMP		0 LOR												3	3	9	Open	1
07 Decant C RSCSH FRONT CAR PARK	12	Completion of commissioning for radiopharmacy is delayed due to unexpected microbiology results	Agree commissioning and performance qualification in advance, and formulate options to outsource elements if licence compromised.	To be progressed as part of Delivery Project Team work stream	Robert Brown												2	4	8	Open	1
07 Decant C RSCSH FRONT CAR PARK	14	MHRA Sign-off & validation of Aseptic suite. Front Car Park Building may not be able to be used. Note - Handover criteria in LOR contract needs to be confirmed through GMP including allocation of risk. Decant of Nuclear med cannot be achieved Revenue Issue (1.04)	Engagement with MHRA	To be progressed as part of DeliveryProject Team work stream	Helen Cripps												2	4	8	Open	1
12 Main Scheme Capital	15	Potential switch of procurement route from P21 to P21+ under direction from DH leads to delay and cost of re-procurement. Noted in Gateway review. (1.09) & HMT approval letter.	Demonstration of adherence to procurement best practice. Legal advice also provided re PSCP being under previous P21 framework.	HMT /DH queries re procurement have been addressed. Approval letter from HMT has made specific reference to the need for legal advice on this issue. This has been provided and confirms the approach is legal.	DP												2	4	8	Open	1
14 Design Process Main Scheme 2	39	Design quality aspirations in excess of budget in tender packages, leading to higher spec, additional cost. Redesign (5.02)	To be discussed on mobilisation	On programme	DP												4	2	8	Open	1
14 Design Process Main Scheme 2	36	A Major Incident occurs, as defined in the NHS Emergency Planning Guidance (2005) as "any occurrence that presents serious threat to the health of the community, disruption to the service or causes (or is likely to cause) such numbers or types of casualties as to require special arrangements to be implemented by hospitals, ambulance trusts or primary care organisations" and such Major Incident delays or disrupts the works.	Manage through construction; Consult with user groups - including	Risk reduced at contract signing workshop	DP												2	4	8	Open	1
14 Design Process Main Scheme 2	50	Commissioning process is compromised by operational demands	Proactive programme management and sufficient experienced internal commissioning resource		0 Duane Passman												2	4	8	Open	1
18 Engagement Staff	1	Staff engagement and availability	Comms strategy	Ensure that the unions and staff side are involved in each stage of the business case development	R Beard												2	4	8	Open	1
18 Engagement Staff	2	Failure to get key staff to buy into plan	Continue process of gaining departmental sign off and PB approval	Staff engaged and supportive during planning process but somewhat impatient regarding the continuing delays.	R Beard												2	4	8	Open	1

18	24 Stakeholder engagement support	3	Disruption to key project/Trust staff structure and individuals	Ensure cover for key roles and contingency plan. Ensure retention of team members in position, cross skill training of team members.	All posts recruited to.	DP	Programme Board	2	4	8	Open	1
18	24 Stakeholder engagement support	6	Options on Tower or Stage 1. Discussions with planners and local residents are required regarding the helipad location. This has added additional cost to the scheme. (Main 3.51)	Continued invasive structural surveys to assess level of risk and necessary cost (necessary for Decant) Plans to locate on TKT now favourably received. CFD studies ongoing.	Structural load concerns have been alleviated. Construction noise can also be mitigated successfully. There remains the issue of the noise impact of the helicopter on landing/takeoff.	DP	Programme Board	2	4	8	Open	1
24	24 Stakeholder engagement support	11	Number of bicycle spaces to be provided on the site in excess of numbers originally proposed.	Liaison with B&HCC regarding the planning conditions continues.	Site provisionally identified as NRB subject to planning processes.	DP	Programme Board	2	4	8	Open	1
32 Main Scheme P21 Delivery		6	Delay to equipment delivery (Group 2, 3) and installation (Group 3, 4). Caused by Trust delays. Leads to programme delays in construction and / or operational commissioning.	Escalate as necessary.		0 DV	Programme Board	2	4	8	Open	1
34 Main Scheme P21 Delivery		11	Deterioration of building fabric or MEP. Caused by materials or workmanship failing to meet specification required for coastal environment. Unless over ruled by derogations, maintenance advice or Building Control officers requirements. Leads to additional time and cost in defects period (24 months).	Specify adequate materials - check specification and alternatives. Allowances included in packages for materials suitable for the environment. Lessons learnt with BDP and Kajima and Estates Team. Risk sits with LOR and subcontracts.	Risk reviewed at GMP workshop July 2015	PSCP	Programme Board	2	4	8	Open	1
34 Main Scheme P21 Delivery		55	IT advances mean that REVIT models within BIM will need to be migrated which leads to loss of information. Currently (2015) REVIT is seen as the software of choice, in future the software may change significantly and migration is not simple to do. Caused by length of programme. Potential link to GSL. Consequence increased time and cost	Plan additional resource to manage and train when it happens. Back ups. Undertake dry runs. Managed process to roll out. GMP to include cost of migration. Revit 2015 now in use.		0 PSCP	Programme Board	4	2	8	Open	1
34 Main Scheme P21 Delivery		77	Lack of engagement to BIM by subcontractors - lack of expertise. Additional time to train subcontractors to work with BIM	Workshops and training with the supply chain		0 PSCP	Programme Board	4	2	8	Open	1
16 P21 + GTH ps		1	Derogations not being accepted by Trust	Team to ensure that the stakeholders have sufficient time to review derogations and understand the implications of proposals	closed at GMP submission	Galiford Try	Programme Board	2	4	8	Open	1
16 P21 + GTH ps		22	Operational policies not finalised to allow design works	Operational policies to be progressed in parallel with developing design proposals - Are ops policies required??		0 Trust	Programme Board	2	4	8	Open	1
16 P21 + GTH ps		24	Client Commissioning and Co-ordination of Group 2,3,4 equipment	Client commissioning plan to be developed for 'soft landing' and communicated in 'commissioning plan'		0 Trust	Programme Board	2	4	8	Open	1
16 P21 + GTH ps		25	Customer / Patient perception whilst works are carried out	Coordination of Contractor logistics plan and Trust signage / notices etc.		0 Trust	Programme Board	2	4	8	Open	1
16 P21 + GTH ps		31	M&E design philosophy not signed off	Concepts to be circulated and Trust to review and sign off. M&E Design to be held until sign off received and budgets agreed to proceed to GMP		0 Trust	Programme Board	2	4	8	Open	1
16 P21 + GTH ps		37	Site phasing and logistics not adequately defined or agreed leading to adverse impact on existing Trust activities and requests to stop work	Adequate communication plan and coordination meetings to keep affected areas informed and works planned to minimise disruption	Portacabins at SMH will provide additional mitigation for these delays	Galiford Try	Programme Board	2	4	8	Open	1
16 P21 + GTH ps		38	Noise, communications, site management and interface not adequately defined or resourced leading to requests to stop work	Adequate communication plan and coordination meetings to keep affected areas informed and works planned to minimise disruption		0 Galiford Try	Programme Board	2	4	8	Open	1
16 P21 + GTH ps		34	May fail to comply with utilities regulations	Engage with utility companies re diversions and design concepts		0 Galiford Try	Programme Board	2	4	8	Open	1
16 P21 + GTH ps		50	Unable to safely maintain existing services to other floors/departments during works	Contractor to liaise with Trust estates team to plan efficient shut-downs.		0 Galiford Try	Programme Board	2	4	8	Open	1
16 P21 + GTH ps		60	Ground Contamination	Boreholes to be taken and monitored	boreholes taken	Galiford Try	Programme Board	2	4	8	Open	1
16 P21 + GTH ps		61	Inadequate infection control of existing services incl water and ductwork systems	Trust to provide existing register to designers		0 Trust	Programme Board	2	4	8	Open	1
16 P21 + GTH ps		65	Insufficient capacity available on existing services	Trust to advise strategy associated with entire building		0 Trust	Programme Board	2	4	8	Open	1
16 P21 + GTH ps		79	Insufficient resources -- either internal or external to support the project, resulting in slippage and increased costs	Identify worststreams, deliverables and ide		0 Galiford Try	Programme Board	2	4	8	Open	1
16 P21 + GTH ps		78	Change in project team membership, resulting in loss of knowledge, and potential for key decision to be un-made and resulting in backtracking	Progress to be maintained to retain team members. Succession plan to be put in place.		0 Trust	Programme Board	2	4	8	Open	1
35 Decant PSCP (LOR) 2		26	That the waterproofing works to the courtyard area disrupt services below the existing slab above A&E, resulting in, for example, water ingress. Consequences may be that the A&E department experiences disruption in delivery of the service. Leads to poor image and perception.	Full LOR quality control and technical inspection process to be implemented during the construction process.		0 LOR	Decant Delivery Group	2	4	8	Open	1
35 Decant PSCP (LOR) 2		41	That LOR's supply chain members fail to perform due to inadequate resource, experience, competence. Resulting in delays to programme, additional cost, additional management time.	LOR to undertake a full vetting process of tenderers during the market testing process. LOR project team to manage, monitor and control performance on site.		0 LOR	Decant Delivery Group	2	4	8	Open	1
35 Decant PSCP (LOR) 2		42	That LOR's consultants fail to perform due to inadequate resource, experience, competence. Resulting in delays to programme, additional cost, additional management time.	LOR to undertake a full vetting process of tenderers during the market testing process. LOR project team to manage, monitor and control performance on site.		0 LOR	Decant Delivery Group	2	4	8	Open	1
35 Decant PSCP (LOR) 2		46	That Trust supplied equipment 'Group 2,3,4' is not available in accordance with the timescales shown on the agreed programme.	Item to be present on Trust internal risk register. Trust Project Manager	Risk increased at risk review meeting 28/09/15- equipment schedule delayed	Trust	Decant Delivery Group	2	4	8	Open	1
10 Design Process 1		12	Adverse weather conditions is above that anticipated (less than 1 in 10). Leads to delay		0 On programme	DP	Programme Board	2	3	6	Open	1
10 Design Process 1		7	Fire Strategy interface for TKT needs to be integrated with design and operational parameters for TKT incorporating the addition of the Helideck, Trauma Lift and flues. Additional work required to meet revised fire strategy	Investigate jointly with design team and Trust fire officer. Go back to fire brigade to remind them that they will be approving strategy - ensure they understand the extent of their involvement (recover wreckage)	On programme	DP	Programme Board	2	3	6	Open	1
10 Design Process 1		31	Noise & vibration in demolition - There may be additional control measures required over and above that currently included to maintain operation of departments in stage 1 building during stage 3 construction (linacs bunkers). Leads to design, testing and construction. CHECK DUPLICATE EARLIER LINACS	WSP report has been reviewed and the methodology has been outlined for Trust to decide on relocation or additional measures. Review what the agreed level is (statutory limits)	Duplicate of 14/10	DP	Programme Board	3	2	6	Open	1
10 Design Process 1		1	The Employer does not enter into the Section 278 legal agreement with the council to allow the works to progress in accordance with the Accepted Programme.	Engage early in the process - follow up July 2015 and discuss at next Main Scheme delivery group. Get it right first time. Programme the works and funding of the works before GMP	Workshop to take place 06/06/15	DP	Programme Board	3	2	6	Open	1
10 Design Process 1		3	Asbestos is discovered within the Site, including any asbestos shown on existing asbestos registers.	Nuclear med - known asbestos and some has been removed (July 2015). Invasive surveys have been carried out. When carry out demolition - take samples and pass to LOR	Risk reduced at GMP risk review meeting	DP	Programme Board	3	2	6	Open	1
10 Design Process 1		34	Trust operational restrictions defined in the contract are changed as a result of variation in Trust requirements impact on design, construction methodology, programme, delay to programme and possible change to design.	Ensures in GMP and contract that methodology is specific inc access and changesovers. Operational restrictions to be kept under constant review - project meetings. Ensure strong staff engagement / communications in place. Gain support from CEO and Ops Team. Contract to set out clear escalation process and key contact - communicate with key duty holders	Has been escalated via Datix to BSUH Board to ensure that construction/programme staff and operational/clinical staff interface is seamless.	DP	Programme Board	3	2	6	Open	1
11 Trust Business Continuity		7	Legislative/regulatory change: non-NHS specific	Communication with authorities for early warning	None known.	DP	Programme Board	2	3	6	Open	1
11 Trust Business Continuity		8	Changes in taxation	Communication with authorities for early warning	None known.	DP	Programme Board	2	3	6	Open	1
11 Trust Business Continuity		9	Changes in the volume of demand for client services	Contingency to be included and sensitivities within financial model. OBC refresh has incorporated this modelling	In the FBC timeframe	DP	Programme Board, Project Team, Local Health Economy Board LHE attendance	2	3	6	Open	1
11 Trust Business Continuity		10	Unexpected changes in medical technology	Robust business plan in conjunction with commissioners	In the FBC timeframe	DP	Programme Board, Project Team, Local Health Economy Board LHE attendance	2	3	6	Open	1
11 Trust Business Continuity		20	3Ts building being too small	Demand management strategies across health economy		0 DP	Programme Board	2	3	6	Open	1

11 Trust Contract		6	Increased costs and revenue risks associated with fragmented temporary Estate	Build in transition contingency. Develop detailed decant plans. Including purchase of St Mary's Hall. Transition costs included in revenue projections	Decant plans underway to being implemented. Transition costs included in revenue projections.	DP		Decant Delivery Group	3	2	6	Open	1
14 Design Process Main Scheme 2		4	Failure to incorporate Control of Infection best practice	Robust FBC process incl design briefs & generation of ADB sheets in conjunction with users	Close liaison with BSUH Infection control team is ongoing.	DP		Programme Team	2	3	6	Open	1
14 Design Process Main Scheme 2		16	Project specific requirements may impact on the ability to meet statutory requirements. Conflict between brief & standards. Trust adapt their brief & impacts on design.	Review changes to Fire Regs / Fire Engineered solution	LOR are proving compliance statement to BSUH to review in September 2014	DP		Design Team	3	2	6	Open	1
14 Design Process Main Scheme 2		22	Following the wind tunnel test and VE study, further Helideck design may alter location / height / treatments / services. If design changes significantly it will need to go back to Planning for the Helideck. Potentially additional design and construction cost and programme	Take revised design to Planning (aesthetics of Helideck) Trust to confirm wind tunnel test to go ahead	Design has now been amended and now looks different. Planners to be notified. Decision to be made on accommodation / water tanks on roof - currently getting prices.	DP		MSDC	3	2	6	Open	1
14 Design Process Main Scheme 2		37	The condition of the Thomas Kemp Tower (TKT) existing structure is not as the existing	Carry out Gap analysis on structural tests while undertaking retrofit works in level 10 (Cardiac) TKT and during any other projects in 15,6,14,13 TKT.	risk reopened with more defined wording at contract signing workshop	DP		MSDC	2	3	6	Open	1
14 Design Process Main Scheme 2		18	Failure to meet deadlines and quality of specification/URS for Nuclear medicine / aseptic unit for Main Scheme stage 1. Risk continues through design, construction and up to handover for compliance and sign-off by MHRA / EA (RPA). Post-GMP delay to programme.	Process in place for design, agree with the TRUST.	On programme	DP		Design Team	2	3	6	Open	1
14 Design Process Main Scheme 2		57	The Employer does not shut down hospital areas or services to allow the Contractor to make connections with existing buildings and services. This will include connections of Stage 2 and 3 works to plant and equipment that is being used in the Stage 1 building. Shutdowns to be identified on the Accepted Programme.	According to logistics programme	Risk opened at contract signing workshop	DP		MSDC	2	3	6	Open	1
14 Design Process Main Scheme 2		61	Planning permission relating to a value engineering item is not given in a timely manner or at all. These are the omission of cladding to the underside of the helideck, the car park ramp being retained at the steeper gradient constructed in Stage 1. (Explanatory note: such value engineering item does not comply with the planning permission given at the Contract Date, but the tendered total of the Prices includes a reduction on account of such item. The Employer will apply for planning permission for such value engineering item, but the risk of the planning permission remains with the employer	Utilisation of planning tracker to mitigate	Risk opened at contract signing workshop	DP		MSDC	2	3	6	Open	1
19 Eng Support Staff		5	Loss of Programme Director / Manager	Monitor workload and create contingency plan, potential cross-skilling, succession planning	DP now working full time on 3Ts as per Gateway review	SP		EWC Team	2	3	6	Open	1
21 CT 21 CT		17	Nuclear medicine required isotope monitoring software to be installed in decant location but this is not funded by 3Ts	Dept needs to seek agreement regarding who will fund this requirement	Works complete. Risk is now on decision regarding funding	Gary Steen			2	3	6	Open	1
21 CT 21 CT		22	Integration of direct works contractors such as IM&T and AV	Programme and project managers to ensure that IM&T elements are fully considered in plans, requirements and any change		0 Gary Steen			3	2	6	Open	1
24 Stakeholder Engagement		7	Introduction of Planning Gain Supplement	Continuing regular dialogue with city planners and research. Include contingency during planning process	Optimism bias within OBC allowed for this cost	DP		LHE chief execs group	2	3	6	Open	1
24 Stakeholder support		10	Location of consolidation centre (1.05)	Proactive liaison with B&HCC about likely location	Risk reopened as has been raised at HLG	DP/LOR			2	3	6	Open	1
24 Stakeholder support		12	The Employer does not obtain permissions and/or consents from 3rd parties, which are the Employers responsibility to provide, to allow the works to progress in accordance with the Accepted Programme. This includes permissions such as crane over sailing licenses, licence to install under or fix to the PFI operated children's hospital, wayleaves, connection of CHP engine to feed back to the DNO (Distribution Network Operator) network.	Identify in the programme the milestones for the TRUST. Consider using Party Wall route to gain cooperation. Ground movement monitoring. Ground anchor design solution agreement with CAPL. Legal discussions Re: PFI with T&T and BSUH in July 2015. LOR to extract drawings to issue to Kajima		0			2	3	6	Open	1
32 Main Scheme Equipment		4	Equipment is based on BoQ Rev. (doc ref required) F03. Awaiting aligned equipment schedule. Could lead to additional/changed equipment added post contract. Impact could be additional costs and programme (depending on timing / and type of change)	Check equipment schedules during contract signing - use document reference in contract. Continuous process of review.		0 DV/LOR		Programme Team	3	2	6	Open	1
34 Main Scheme P21 Delivery		20	Scheme impacts on surrounding area to a greater extent than indicated in the Environmental Impact Assessment targets (noise, dust, vibration).	HIA and EIA	Ongoing communication with local residents will be maintained.	PSCP		PSCP	3	2	6	Open	1
34 Main Scheme P21 Delivery		5	Performance of design team may be lower than anticipated. Caused by performance of individuals, disruption to the team due to re-starting. Redesign & programme. Reputation impact. Design coordination post procurement. Potential re-work during / after construction	QA of designers; lessons learnt on other projects. Replacement of designers for subsequent stages	risk reviewed. GMP review in July 2015. To be monitored during construction process.	PSCP		PSCP	3	2	6	Open	1
34 Main Scheme P21 Delivery		53	There may be a lack of design co-ordination caused by the partial stage E	QA design and coordinate between services REVIT model	Risk raised after LOR FBC review. Requires continual monitoring.	PSCP		PSCP	3	2	6	Open	1
34 Main Scheme P21 Delivery		73	Misalignment of tolerances between works packages. Gap analysis. Design development, manufacturing tolerances, spread of +/- tolerances, accumulation of tolerances within packages which leads to higher tolerances. Impact on finishes, structures. Leads to rework on site and additional cost and programme.	Review and compare works information for contract signing Design development	QA process within design to be introduced and maintained.	PSCP		PSCP	3	2	6	Open	1
34 Main Scheme P21 Delivery		88	Weather conditions are worse than anticipated in programme durations leads to unrecoverable delay (i.e. less than 1 in 10 event in CE process) as defined in the NEC / JCT contract (cold weather)		0 Requires monitoring and management	PSCP		PSCP	2	3	6	Open	1
34 Main Scheme P21 Delivery		93	Planning approval of changes-risk that approving material planning changes in Stage E design, planners do not approve or that there are excess costs of getting it approved.	Meet planners to get approval - Trust and LOR	Some contracts and conditions still require approval by B&HCC.	PSCP		PSCP	3	2	6	Open	1
34 Main Scheme P21 Delivery		95	Delay in the resolution of the design to Value Engineering items impacts the design completion of the Project	Priorities resolution of Value Engineering items with the Design Team target to close out with design production by April 16	Risk raised at contract signing workshop	PSCP		PSCP	2	3	6	Open	1
34 Main Scheme P21 Delivery		96	Failure to secure "Buying Gains" included in the GMP	Further development of procurement strategy and robust budget management	Risk raised at contract signing workshop	PSCP		PSCP	2	3	6	Open	1
16 P21+ GT ps		18	Design to current brief but does not allow for future proofing / remodelling	Trust risk - design to be future proofed as far as possible without impacting on budget.	0 Trust				2	3	6	Open	1
16 P21+ GT ps		32	IT design and Trust scope	IT concepts to be issued and mtg to be arranged to review IT strategy and design. Trust to confirm capacity and scope.	0 Trust				2	3	6	Open	1
16 P21+ GT ps		41	Complexity and costs of abnormalities due to site constraints increases	SI to be undertaken asap	0 Galiford Try				2	3	6	Open	1
16 P21+ GT ps		45	Shut downs and services diversions	Connections and requirements to be scheduled and agreed	0 Galiford Try				2	3	6	Open	1
16 P21+ GT ps		49	Material long lead in periods (eg plant / equipment)	Procurement programme to be produced and reviewed within Commercial meeting - early orders required and nitbec to be delivered prior to required orders being placed	0 Galiford Try				2	3	6	Open	1
16 P21+ GT ps		44	Access into surrounding departments adjacent main construction activities for out of sequence installations.	Adequate communication plan and coordination meetings to keep affected areas informed and works planned to minimise disruption	0 Trust				2	3	6	Open	1
16 P21+ GT ps		54	Group 2 FR&E items handed over by Trust not suitable for incorporation into the works	Equipment strategy to review this; and adequacy of transferred items.	0 Trust				2	3	6	Open	1
16 P21+ GT ps		67	Inflation in construction costs pre-GMP	Budgets to accommodate	0 Trust				3	2	6	Open	1
35 Decant PSCP (LOR)		1	That there is a failure of the design to achieve the brief, and or, a divergence of design from the Trust's operational / design policies that were made available to LOR during Phase 3. Possibly resulting in redesign & delay.	Full LOR quality control and design inspection process to be implemented during the construction process.	Risk increased at risk review 28/09/15	LOR		Decant Delivery Group	2	3	6	Open	1
35 Decant PSCP (LOR)		3	That vandalism / damage occurs to the Works during construction	LOR to install hoarding. Security guard / cameras	0 LOR			Decant Delivery Group	2	3	6	Open	1
12 Main Scheme Capital		31	There is a risk that LORs actions may result in consequential losses greater than 10% of the GMP figure (note: the consequential loss provisions in the P21 contract will be capped at 10% based on the standard template) Example is a huge defect.	LOR team performance, methodology, monitoring	reduced in GMP workshop July 2015	DP		Programme Board	1	5	5	Open	1

14 Design Process Main Scheme 2	23	ENT audiology booth may not work above the car park due to mitigation in place which may not be sufficient. This could be caused by Trust changing requirements (desk with as a brief change), or post construction the Audiologist is not satisfied. Impact would be higher cost and increased design - delay to building open. (3.29)	Review testing requirements with the TRUST	On programme	DP		MSDC	1	5	5	Open	1	
16 P21+ GT/ps	35	Interface(separation) between public, hospital and construction areas - Safety	Construction method statement and health and safety plan to be developed with appropriate segregation of works and phasing plan	0	Trust			0	1	5	5	Open	1
16 P21+ GT/ps	8	Risk of aspergillus to immuno compromised patients exacerbated by the impact of construction on the RSCH site. Impact on decant programme caused by delay whilst mitigations are identified.	Review of evidence from other construction sites and further testing as work on site progresses		Trust			0	1	5	5	Open	1
04 Decant - all	37	Lack of infrastructure capacity in TKT to cope with additional loads associated with CTVD.	LOR to undertake review and report back. Review consequences & options.		RSB	Permanent solution included within NRB scope.	Decant Delivery Group	0	1	4	4	Open	1
07 Decant C RSCH FRONT CAR PARK	13	Environment Agency (EA) will not issue licence for radiation safety in accordance with decant designs. Applies to all areas with sealed sources. Note - Handover criteria in LOR contract needs to be confirmed through GMP including allocation of risk. (1.02)	Based on other previous projects. Impact can be high cost implications £0-£20,000 and several months delay. Decant Project part of mitigation strategy.	To be progressed as part of Delivery Project Team work stream	Helen Cropp		Decant Delivery Group	0	1	4	4	Open	1
07 Decant C RSCH FRONT CAR PARK	1	Enabling works disrupt adjacent services (MRI services) through vibration or magnetic interference.	Report received for review. South MRI affected and trailer/off-site solution being investigated. Smaller plant solution enables North MRI to be used.	On-going discussions with users. Works programmed. Craning of modules complete. Potential risk related to external cladding works and lift installation.	Laura Hodnett		Decant Delivery Group	0	1	4	4	Open	1
06 Decant Main Capital KPC/ABR	7	Condition of existing structures & services changes scope (exceeds assumptions in GMP) Caused by intrusive surveys not being able to be completed (4.12)	Good programme management		RSB		Decant Delivery Group	0	2	2	4	Open	1
12 Main Main Capital	5	Council Overview and Scrutiny Committee/Health and Wellbeing Board don't support scheme	Ensure all documentation available and processes rigorously followed	Regular presentation to HOSCs have taken place and will continue. Commissioner oversight Forum now being reestablished.	DP		Programme Board	0	1	4	4	Open	1
14 Design Process Main Scheme 2	20	Design or performance requirements relating to energy and carbon above and beyond Building Regulations requirements. Trust brief issue. Change spec of glass (3.25)	Keep thermal model up to date.	On programme	DP		MSDC	0	2	2	4	Open	1
14 Design Process Main Scheme 2	21	Cleaning / Access strategy not yet reviewed with the Trust may delay or change the design (3.26)	Design meetings with the client	On programme	DP		Facilities and Estates	0	2	2	4	Open	1
14 Design Process Main Scheme 2	6	The Employer does not achieving the BREEAM credits which he is required to achieve under the Works Information	Ensure coordination between PSCP and Trust to fulfil BREEAM requirements Review BREEAM operational (Trust) requirements in OBC refresh and include in the plan	Ensure coordination between PSCP and Trust to fulfil BREEAM requirements Review BREEAM operational (Trust) requirements in OBC refresh and include in the plan Find out if AEDET counts towards BREEAM	DP		Programme Team	0	2	2	4	Open	1
14 Design Process Main Scheme 2	13	A planned engineering service changeovers is delayed due to operational requirements within the existing Trust Estate. Changeovers to be identified on the Accepted Programme.	Design and construction sequencing to be coordinated closely with Trust Operational procedures Stage 1 & 2	On programme	DP		Facilities and Estates	0	2	2	4	Open	1
14 Design Process Main Scheme 2	43	Planned or emergency work within the hospital estate that affects the works.	Process set up to review access and maintenance with the Trust.	On programme	DP			0	2	2	4	Open	1
18 Main Staff	6	Project team retention	Maintain team size in order to fulfil demands of design process and FBC production. We could appoint internally or resource externally (the latter is more costly)	One change consultant has now been appointed who started in August 2014. We have now appointed externally to the 2nd post	DP		Programme Team	0	1	4	4	Open	1
21 ICT	1	IT and telephony services are disrupted during clearance and stage 1 build	Vibration and dust mitigation activities are undertaken. Replacement ducting being discussed	Site logistics presentation took place in March 2014.	RSB			0	1	4	4	Open	1
24 Stakeholder support	15	poor public relations reduces public support for the scheme	trust comms strategy	Comms strategy being implemented	R Beard		Comms Strategy/ Review Programme Board membership.	0	1	4	4	Open	1
24 Stakeholder support	17	PPI / external stakeholder engagement	Ensure stakeholders are aware of strategy behind and need for developing new services. Ensure regular PPI involvement in the development of the Business Case. Involve people in next phase of design. Link up with patient experience programme.	Regular involvement at all levels is happening including PPPP	R Beard		Comms Strategy	0	1	4	4	Open	1
24 Stakeholder support	13	Discharge of Planning Conditions – Trust Brief/Scope/drawings within approved Planning consent are changed by Trust or third party which increases costs/resources/programme. See planning costs tab for further details. Planning condition description states that it is assessed at the end of the programme.	Cross reference existing baseline wind measurements against after (if there are complaints through council) Extend wind tunnel testing to cover Bristol Estate to assess potential mitigation measures that may be required. Note - current plan has Bristol Gate trees in landscaping Work on section 106 is being carried out (Jul 2015)	Planning conditions tracker now in place	DP		Programme Board	0	2	2	4	Open	1
34 Main Scheme P21 Delivery	2	Failure to design to HBNs / HTMs (not approved as derogations) - Refer to Contract Terms for order or priority of HTMs, HBN and Building Regulations.	Ongoing maintenance and signing of derogations register. Derogations workshop. Spend time going through the HBNs and HTMs	Reviewed at joint session with PSCP 09 Sep 14 and reduced with PSCP. Risk has reduced since 2013 due to going through process and opportunity to derogate. If Trust delay agreeing derogations this will be a CE. Trust to review on scheme completion.	PSCP		PSCP	0	2	2	4	Open	1
34 Main Scheme P21 Delivery	24	There may be a lower supply of local labour than planning conditions require (obligation in section 106). Extra cost to provide another local benefit instead of local labour. 20% local contribution is Planning commitment.	Obtain full definition of "local" of specific BN postcodes and "20%" commitment. Carry out analysis on demographic distribution in the area. Understand how this is monitored. Through enquiry and mid-tender interview requirements to be passed onto the supply chain.	Obtain full definition of "local" and "20%" commitment. Understand how this is monitored. Through enquiry and mid-tender interview requirements to be passed onto the supply chain. Risk reviewed at GMP workshop July 2015. Continue work to implement Social Value Strategy with local partners at B&HCC.	PSCP		PSCP	0	2	2	4	Open	1
34 Main Scheme P21 Delivery	35	Construction Logistics - assumptions made in pricing Construction Environmental Management Plan (CEMP) are exceeded. (Note - CEMP was accepted by Planning). Leads to increased costs	Construction logistics plan to be presented.	Risk lowered in GMP workshop July 2015. In provisional sums.	PSCP		PSCP	0	2	2	4	Open	1
34 Main Scheme P21 Delivery	94	Exchange rates volatility throughout project. Contractors from EU. (Majority to go through brokers in the UK). Increased costs.	Maximise placing of orders with sub contractors in sterling		0	PSCP	PSCP	0	2	2	4	Open	1
34 Main Scheme P21 Delivery	18	Disruption to hospital staff/public (ENT / Linacs / MRI) during construction where LOR exceed agreed Noise, Dust, and Vibration limits set out in the Contract resulting in instruction to stop work or change programme and method of works.	Planned and managed disruption Consider acoustic shield around ENT - look at examples elsewhere	Baseline measures have been included in the contract. Parameters for agreed tolerances will also be in the contract	PSCP		PSCP	0	2	2	4	Open	1
34 Main Scheme P21 Delivery	28	There may be a risk that the Site Waste Management Plan (SWMP) targets are not delivered. Impact is a penalty and possible change to methodology	Part of the CEMP	Implement plan which has been agreed.	PSCP		PSCP	0	2	2	4	Open	1
34 Main Scheme P21 Delivery	69	Flooding of the construction site due to surface or ground water. This would delay construction and may require pumping etc (note TKT Tunnel) Ground water remains a LOR risk however Surface Water is only held as an LOR risk up to the 10 year event threshold as set out in the Compensation Event Process.	Design includes removal of all soakways included in the South service road All stage to Stage 2		0	PSCP	PSCP	0	2	2	4	Open	1
34 Main Scheme P21 Delivery	74	There may be unforeseen interface gaps between packages throughout procurement. In terms of quantification and scope of works	Risk reviewed at GMP workshop July 2015	Risk reviewed at contract signing workshop.	PSCP		PSCP	0	2	2	4	Open	1
16 P21+ GT/ps	16	Changes to the wider 3Ts project impact the current proposals	Project team to manage the scheme requirements in the context of the 3Ts scheme		0	Trust		0	1	4	4	Open	1
16 P21+ GT/ps	17	Inadequate or late wider public consultation, results in late changes in scope	Key stakeholders (predominantly local authority, local residents and services in close proximity to be identified and engaged)		0	Galford Try		0	1	4	4	Open	1
16 P21+ GT/ps	23	Maintaining service road, clinical services specifically with respect to shutdowns, isolations and drainage. Risk associated with stoppages due to noise, dust, vibration cause outside of agreed parameters	Construction plan to minimise disruption to access road, clinical services and discomfort for patients		0	Trust		0	1	4	4	Open	1
16 P21+ GT/ps	40	Inability to achieve Bream "Very Good" due to failure of PSCP to achieve credits owned by PSCP during pre-assessment in an affordable manner	BREEM assessor to be appointed asap and initial assessment completed and design requirements identified		0	Galford Try		0	1	4	4	Open	1
33 Decant PSCP (LOR)	79	Insurance claims are made within LOR's policy excess limit, which flow from LOR's construction activities. Full adherence to LOR operational policies and liaison with Trust HLG.	Full adherence to LOR operational policies and liaison with Trust HLG.		0	LOR	Decant Delivery Group	0	2	2	4	Open	1
33 Decant PSCP (LOR)	82	That the Trust's Fire Officer (TFO) does not sign off the project, or elements of the project, and/or introduces changes to the signed-off and market tested design.	Item to be on Trust Risk Register		0	Trust	Decant Delivery Group	0	2	2	4	Open	1

33 Decant PSCP (LOR)	1	85	That the existing services / infrastructure of the hospital is insufficient to service the construction and or operation of new facilities delivered under this contract.	Item currently on Trust Risk Register, Trust Owner Phil Rol		0	Trust		Decant Delivery Group	2	2	4	Open	1
35 Decant PSCP (LOR) 2	2	4	In full agreement with the Trust the design has been based upon 2008 Building Regulations, which has also been agreed with the BHCC building control officer. If BHCC change their position at any time there will be significant cost/delay introduced into the scheme.	Item to be present on Trust internal risk register.	Certificate awaited.		Trust		Decant Delivery Group	1	4	4	Open	1
35 Decant PSCP (LOR) 2	2	5	The agreed BREEAM rating for the project is 'Good'. Project Manager's Correspondence 002 March 2011 confirms. Any change in requirement, and any costs or time flowing from any such change, is an Employer's risk item.	Item to be present on Trust internal risk register.		0	Trust		Decant Delivery Group	1	4	4	Open	1
35 Decant PSCP (LOR) 2	2	14	That the existing Courtyard roof leak continues and or worsens after LOR's new membrane is installed.			0	Trust		Decant Delivery Group	2	2	4	Open	1
36 Decant PSCP (LOR) 2	2	22	That programme / site logistics requests are imposed by the Trust outside the agreed assumptions document and site logistics plan (CEMP) detailed within the Contract Works Information	Item to be present on Trust internal risk register. Trust Project Manager / HLG to own		0	Trust		Decant Delivery Group	2	2	4	Open	1
36 Decant PSCP (LOR) 2	2	34	That noise and or vibration, created by Laing O'Rourke and or their supply chain partners, while discharging their obligations under the Contract, leads to a complaint that delays, stops or changes the method of delivering the Works as stated within the Works Information.	Item to be present on Trust internal risk register. Hospital Liaison Group (HLG) project delivery manager to keep all Trust stakeholders informed of planned works / disruption at all times.		0	Trust		Decant Delivery Group	2	2	4	Open	1
36 Decant PSCP (LOR) 2	2	35	That noise levels from new plant installed as part of the works is not acceptable to, for example but not limited to, end users and or local residents.	Item to be present on Trust internal risk register. Trust Project Manager to own		0	Trust		Decant Delivery Group	2	2	4	Open	1
36 Decant PSCP (LOR) 2	2	39	That the appointed modular contractor(s) enters insolvency after delivery to site of the Modular building units.	LOR to undertake D&B checks on a companies before appointment. LOR procurement team to dynamically review commercial health of appointed contractors / suppliers.		0	LOR		Decant Delivery Group	1	4	4	Open	1
07 Decant RSCH FRONT CAR PARK	1	16	Counter Terrorism Security Adviser (CTSA) sign-offs delays Decant project. (3.01)	Early engagement, throughout construction phase.	To be progressed as part of Delivery Project Team work stream		Robert Brown		Decant Delivery Group	1	3	3	Open	1
08 Decant Main MSDCB	1	4	Asbestos contamination 545 - risk of more asbestos than assessed at Management Survey (Type 2). (3.08)	Plan C works reduced - asbestos register inspected,	re-inspections carried out no new signs of asbestos identified. Risk reduced from 2x3		RSB		Decant Delivery Group	1	3	3	Open	1
14 Design Process Main Scheme 2	1	38	A tower crane is stopped due to air traffic use of the Helipad/Helideck. The Contractor has allowed for up to one hour a week of crane stoppage due to air traffic use.	Contingency plan including agreement with AAT that they would make the judgement on the day.	Required operational policy when in use.		DP		MSDC	1	3	3	Open	1
14 Design Process Main Scheme 2	1	56	Any existing hospital building that is supplied by the new Energy Centre requires more power than that required in the Works Information	Monitor power usage	Risk opened at contract signing workshop		DP		MSDC	1	3	3	Open	1
14 Design Process Main Scheme 2	1	58	Discovery of any invasive plants, including Japanese Knotweed, that require treatment or removal.	Regular surveys	Risk opened at contract signing workshop		DP		MSDC	1	3	3	Open	1
14 Design Process Main Scheme 2	1	59	The existing DNO (Distribution Network Operator) infrastructure is not capable of allowing connection of the CHP (Combined Heat & Power) engine without an upgrade to the existing infrastructure.	Monitor power usage	Risk opened at contract signing workshop		DP		MSDC	1	3	3	Open	1
14 Design Process Main Scheme 2	1	60	DNO will not enter into an agreement to allow the CHP to feed back into the mains electrical infrastructure	Negotiations with with DNO	Risk opened at contract signing workshop		DP		MSDC	1	3	3	Open	1
21 ICT	1	18	Loss of access to clinical IT services	Resource with Trust Information Team. Task/Activity & programme scheduling / management		0	Gary Steen		Decant Delivery Group	3	1	3	Open	1
27 Elicitation, Research & Sim	1	27	Failure to implement EPR	Full implementation of EPR is in process		0	G Sten		EP R Delivery Group	1	3	3	Open	1
34 Main Scheme 2 P21 Delivery	1	2	Business case for simulation facilities (faculty, administration, equipment, backfill costs) may not be affordable	Development of Simulation Strategy	3Ts will incorporate equipment in the BuOs. However, if it is unaffordable, this will be sent back to leads to work up a separate case.		BSUH		Simulation Steering Group	1	3	3	Open	1
34 Main Scheme 2 P21 Delivery	1	21	Unforeseen loss of services (electricity, water and drainage or gas) due to works including damage to services. Disruption to hospital / surrounding areas. Biggest risk on interface works. Data infrastructure not covered to be discussed	Method statements, permits to work. Introduce outage schedule with regular meetings with the TRUST. Develop contingency plan		0	PSCP		PSCP	1	3	3	Open	1
34 Main Scheme 2 P21 Delivery	1	33	Vandalism and damage on site during construction. Leads to additional cost and delay	LOR procedures, Trust presence CCTV and other security measures.		0	PSCP		PSCP	3	1	3	Open	1
15 NRB	1	1	Ground Conditions - Contamination, UXB, archaeology, fossils, human remains, obstructions, sink hole, additional services.	Ground surveys to be undertaken	On NRB 16 (63) so duplication		RSB		Decant Delivery Group	1	3	3	Open	1
16 P21 GTh P8	1	13	Service requirements change during delivery of the scheme resulting in change of scope.	Client sign off at 1:50 stage achieved		0	Trust		Decant Delivery Group	1	3	3	Open	1
16 P21 GTh P8	1	19	Failure to incorporate Art / graphics into the design appropriate to the project	0		0	Trust		Decant Delivery Group	1	3	3	Open	1
16 P21 GTh P8	1	43	weather - exceeding 10 year average which impacts on the project	P21+ / NEC3 contract states weather outside of 10 year average is Trust / Client risk.		0	Galford Try		Decant Delivery Group	1	3	3	Open	1
16 P21 GTh P8	1	47	Site Security during construction	Contractor to establish site logistics and security plan as part of Project Management Plan		0	Galford Try		Decant Delivery Group	1	3	3	Open	1
16 P21 GTh P8	1	48	High winds over and above 10.8metre/second; stoppages to cranes	Review and confirm wind speed		0	Galford Try		Decant Delivery Group	1	3	3	Open	1
16 P21+ GTh P8	1	46	Current design is being based on current legislative requirements and other guidance. There is no allowance contained within the capital costs to cover any design changes that may be required in the future to accommodate new regulations or recommendations.	Monitor changes to legislation and guidance		0	Trust		Decant Delivery Group	1	3	3	Open	1
35 Decant PSCP (LOR)	1	6	That HBN/HTM derogations and or requirements may change throughout the project - leading to additional cost and delay to programme.	Item to be present on Trust internal risk register. Trust to sign off required derogations		0	Trust		Decant Delivery Group	1	3	3	Open	1
36 Decant PSCP (LOR)	1	17	That the FCP Modular buildings failure to meet required RF factors.	Full LOR quality control and technical inspection process to be implemented during the construction process.		0	LOR		Decant Delivery Group	1	3	3	Open	1
35 Decant PSCP (LOR)	1	32	That the Trust's operational services / capability are disrupted by LOR undertaking the planned demolition on site.	Demolition method statements, Surveys and assessments informing technical design with specialist designers and subcontractors	Query why this is a BSUH risk?		Trust		Decant Delivery Group	1	3	3	Open	1
35 Decant PSCP (LOR)	1	36	Environmental impact during construction caused by the Works water course contamination, discharge into public systems. Leads to additional cost and delay to clear up.	Full LOR quality control and technical inspection process to be implemented during the construction process. Trust permits obtained.		0	LOR		Decant Delivery Group	1	3	3	Open	1
36 Decant PSCP (LOR)	1	40	Failure to appoint subcontractors in line with the agreed GMP / Phase 4 Contract. Including but not limited to: change in prices, withdrawal of subcontractors, failure to reach agreement with Contract Conditions.	Full LOR Procurement Manager. Use of established and known supply chain - careful use of Package Management protocols		0	LOR		Decant Delivery Group	1	3	3	Open	1
07 Decant RSCH FRONT CAR PARK	1	23	Construction delayed by RPAs inspection and/or non availability of BSUH RPA. Limited specialist resources available. Delay to programme to be compliant (4.20)	LOR provided construction programme for FCP, which identifies when RPA access to the site will be required.	Trust will then review the proposed plan at each identified point, identify how long testing would be expected to take and source RPA.		RSB		Decant Delivery Group	1	2	2	Open	1
07 Decant RSCH FRONT CAR PARK	1	22	Asbestos contamination Barry Building Link - risk of more asbestos than assessed at R&D survey. This cannot be determined by a pre-construction survey until the building is empty. Delay while removal, additional cost. If in operational area - potential closure of dept.	MRI suite after 2000 when use of asbestos products banned. Likelihood very low	Survey allowed for in Phase 4 works		RSB		Decant Delivery Group	2	1	2	Open	1
12 Main Scheme Capital	1	3	Unexpected changes in the epidemiology of the people in the catchments area	Robust business plan in conjunction with commissioners including clinical commissioning group.	In the FBC timeframe		DP		Programme Board, Project Team, Local Health Economy Board	1	2	2	Open	1
14 Design Process Main Scheme 2	1	35	Underground obstructions or unstable adjacent structure to piled foundations (4.01)	To be discussed on mobilisation	On programme		DP		MSDC	2	1	2	Open	1

