

TECHNICAL APPRAISAL OF THE WEST HERTS HOSPITAL SITE REVIEW REPORT

NOTE. The report can be found at

https://www.westhertshospitals.nhs.uk/newsandmedia/mediareleases/2020/august/sitefeasibilitystudy.asp#_ftn1

1. RFLPS Independence Issue - timing

The Study is presented as being independent. However the most critical criterion used to determine the feasibility of the sites reviewed is deliverability within the Government's 2025 HIP1 timeframe.

The two main factors that determine whether or not the timeframe is achievable are securing planning consent and construction time. RFLPS have obviously undertaken their own appraisal covering planning (and procurement) but have relied on the Trust's construction times to arrive at their 'Site Programmes' and the optimistic and pessimistic 'Substantially Complete Dates'. Their findings cannot therefore be properly considered as independent.

2. New site search

The Trust's failure to instruct a new independent site search to seek out the most suitable and viable central sites currently available is a serious dereliction of their duty. Without doing so they cannot comply with CIA Model procedures nor set out to best serve West Hertfordshire's public.

The Trust's last two SOCs describe the seriously poor condition of their estate, the continual infrastructure breakdowns and functional deficiencies. They also provide capital cost estimates that clearly re-confirm the very obvious fact that overbuilding on an operational site will cost substantially more than building a new hospital on a clear site (see Section 5

Cost Differentials of this Appraisal). Funding is not available at this time to allow all of the buildings and infrastructures on the existing estate to be replaced and it is incumbent on the Trust to use available funding to the best effect, ensuring value for money and bringing the maximum proportion of the facilities up to acceptable standards with minimum disruption to healthcare services. The need for the Trust to be fully committed to finding the best available suitable sites and to properly evaluate new hospital sites within the OBC shortlist is self evident.

Re-confirming the 'correctness' of the decisions for dismissing the inclusion of sites previously identified over the past 5 years in order to retain the existing Watford site is misleading and does not follow the intentions under the CIA Model. Similarly, the introduction of a further Watford (WR) option on the basis that it provides an alternative clear site does not constitute an alternative to the 'Greenfield' sites. Only one third of the proposed site area is situated within the Riverwell land and two thirds is on the Trust's exiting estate and would require demolition and substantial enabling and ground engineering works.

A new, fully independent and comprehensive site search should therefore be commissioned urgently. This could include, for example, plots adjacent to and within the Crown Estate development land that can currently provide access before new highway infrastructure around Junction 8 of the M1 is put place.

3. Relative Complexities and Risks

RFLPS's Report contains many statements that the 'Greenfield' sites carry much greater risks and complexities than the WGH based options. It is clear that RFLPS have based this conclusion on advice provided by WHHT rather than any independent appraisal carried out by themselves. Furthermore, under 7.3 Programmes the report advises that their work has been carried out 'in the absence of a detailed scheme to appraise'. Indeed the Trust have either not arrived at basic layouts and implementation plans for the WGH based options or have chosen not to publish them. From RFLPS's statement it would appear to be the former reason.

Establishing solutions that are possible to accommodate on the Watford site to achieve the objectives is fundamental to ascertaining the complexities and risks that they present. The Trust's presentations and publications from the start of their OBC process have made it clear that the most critical criterion is for any selected option to be capable of being substantially completed to meet the Government's HIP1 deadline of 2025, and RFLPS's Report makes it clear that is the brief that they have worked on.

A clear understanding of the complexities and risks associated with each site and option is necessary in order to arrive at any credible and reliable programme for establishing whether or not the 2025 deadline (or even thereabouts) can be met. **At present the conclusions in the study regarding the WGH options are based on totally unfounded optimistic assumptions without adequate research.** However, it is obviously the intention for this Report to confirm the correctness of retaining the Watford site for emergency care and for excluding any alternative central clear site from the shortlist.

The following lists show the potential risks and complexities associated with WGH based options compared with building on a clear or 'Greenfield' site.

3.1 WGH Redevelopment Option 1 and variations (£350M/£400M)

1. Substantial enabling works required to provide safe operational environment in existing facilities, particularly the principal PMoK building.
2. Demolition and decanting for Pathology, Mortuary and Chapel of Rest.
3. Invasive surveys of buildings to be reconfigured and refurbished together with site services infrastructures.
4. Dependence on the pre-provision of a large multi-storey car park with bridged access.
5. Removal of asbestos and other deleterious/contaminated materials.
6. Substantial ground engineering works after soil investigations and structural design following demolition of existing buildings to provide solutions for unknown conditions and severe gradient.
7. Diversions, protection, adaptations and renewals of existing fragile services infrastructures.
8. Provision of abnormal utility services for new block including drainage attenuation tanks.
9. Working restrictions and segregation to allow demolition and construction works to progress within an operational hospital estate.
10. The likelihood of imposed abnormal planning requirements to take account of the very close proximity of residential, school and other buildings that will form part of the high density Riverwell regeneration development including the road infrastructures.
11. Complex Digital IT carcassing and the need for phasing and reconfigurations when installed.
12. Adaptations and refurbishment works within PMoK including rerouting of services during occupation.

Each one of these additional pieces of work and encumbrances would have a major impact on time and cost coupled with ongoing risks due to conditions that cannot be determined until areas of the existing buildings and infrastructure are opened up during

the progress of the works. There are other disadvantages that would result from this option that include major compromises and derogation against current NHS standards.

3.2 WGH/Riverwell Partial New Build (£590M)

This option would also suffer from the potential risks and complexities listed for the WGH Redevelopment Option as it is still based upon overbuilding on the existing WGH site. RFLPS's Report states that only one third of the construction area required for the option would be allocated from the Riverwell development land. With the single exception of item 12 above all other items would still apply either to a greater or lesser extent.

Whilst it is obvious that it would be necessary to build over the steepest gradient of the site, without a basic layout solution it is not possible to assess the implications of other impediments and constraints. However, given that the location of the proposed land is surrounded by operational hospital buildings and a major high density mixed development site that all rely on the same access roads, there will be many more complexities to be faced.

3.3 Alternative Central Clear Site Options

RFLPS's Study has not included a new site search and only reviewed previously identified sites that the Trust had discounted following appraisals carried out in conjunction with their consultants for the 2017 and 2019 SOCs. Notwithstanding that the specific sites featured in the Report cannot be considered to be the most suitable and viable available, the following paragraph describes the comparative lower level of risks and complexities normally associated with developing clear or 'Greenfield' sites.

The risks of building on a clear site are far more controllable than overbuilding on an existing hospital estate whilst in operation. Almost all risks and abnormal conditions can be identified and solutions found before major commitment and expenditure through competent investigations, consultations and surveys. More than one clear or 'Greenfield' site could be explored in parallel before final selection of the most suitable and viable option. Risks are largely of the nature of unforeseen planning and consultation issues that could result in delays to commencement, or in extreme circumstances, should erroneous site selections be made, a lost site option. **The risks of cost and time overruns do not compare with the risks associated with overbuild developments, as for clear site projects, full security over both can be achieved soon after planning consent is obtained.** They provide the scope for optimal cost and operationally efficient design, maximising fast tracking opportunities with off-site construction methods.

4. Programmes

RFLPS's Report provides six programmes – schedules for construction - covering each one of the site options featured in their study. The programmes provide two timelines based upon their optimistic and pessimistic views. None of the programmes show the 2025 deadline as achievable based even upon their optimistic timelines.

The four programmes covering the 'Greenfield' options are almost identical, mainly showing completions in the first quarter of 2027 based upon RFLPS's optimistic view and the middle of 2029 for their pessimistic view. These programmes show generous activity durations with little or no overlaps in complete contrast to the programmes for the two Watford based options. RFLPS notes on page 37 of their Report, referring to the redevelopment option (WO) 'the programme is based on a number of working at risk assumptions that would need to be verified by the Trust and their regulators'. It is evident that this approach has also been taken for the Watford partial new build option (WR). The optimistic timelines show completions before the middle of 2026 for WO and before the last quarter of 2026 for WR.

The following analysis of the WR programme demonstrates the risks and inadequacies covering both of the Watford based options (the activity descriptions are shown in bold):

- **Prepare and approval of RIBA Stage 2 design** starting concurrently with **Negotiation of conditional land deal** and completing before **Agreement with Stage 3** immediately following on before **OBC preparation and approval**.
- **Procurement of building contractor** immediately after **Completion of design to RIBA Stage 2** but substantially in advance of **OBC approval**.
- **Contractor design and pricing** also commencing immediately after **Outline planning consent** but before **OBC approval**.
- **Commencement of enabling works** (substantial) well before **Completion of contractors' pricing** and **FBC preparation** is advanced and **Submitted for approval**.
- Totally inadequate time allowed for invasive **Site surveys** that are shown to be completed in 2020 and should also include risk assessments and determining enabling works.

The above analysis demonstrates the inconsistency in approach for arriving at the timelines for the Watford based options against the 'Greenfield' alternatives. **The Watford options have been based upon a fast track high risk approach whereas the 'Greenfield' programmes have been arrived at through a much more conservative approach.** It is additionally clear from RFLPS's notes under programme WO that it only relates to the new

build element of the option and that further estate reconfiguration and refurbishment works would need to be carried out over another two years. **This would result in overall completion taking place in the middle of 2029 based on RFLPS's most realistic (pessimistic) timeline assuming that there would be no overruns, which is extremely unlikely to be the case.** RFLPS's programme for WR also notes that it only considers the delivery of an emergency care facility and it can therefore be assumed that a similar additional period will be required to complete all of the works proposed under this option too. **It is clear that the Watford based options would not only result in high risks of time and cost overruns but would also involve continued disruption to healthcare services for 8 years or more.**

RFLPS's Report suggests that 'with a strong will and motivation' there would be scope to accelerate the programmes for the Watford-based options to secure an improvement of 3 to 6 months. It is evident from other statements made in their Report that the Trust have not provided sufficient information in respect of the proposed works for the options nor the complexities that would be faced for RFLP to be able to make any such valid judgement. RFLP have acknowledged that the programme periods (covering only the principal new build elements of the options) have already been substantially shortened at risk in order to arrive as near to the HIP1 deadline as possible. There would be a very much greater likelihood of the proposed Watford based options becoming total indefensible disasters than being made viably deliverable within the HIP1 timeframe.

5. Cost Differentials

RFLPS's Report provides a Summary of Costs under Figure 8.1 on page 39. These show their estimation of the abnormal construction costs associated with each option. Irrespective of whether their assessments are accurate or not, in isolation this comparison does not have significant relevance for the purpose of ascertaining the financial viability between overbuild and clear site options.

The capital cost estimates provided for the Trust by Arcadis for the 2019 SOC, clearly show, not surprisingly, that redeveloping WHHT's existing estate to achieve functional suitability and bring the buildings and infrastructures up to NHS standards A or B would cost over 40% more than delivering new standard A hospital facilities with a 60 year lifespan on a clear/'Greenfield' site. This has been reconfirmed in the Trust's Answers to Frequently Asked Questions currently accessible on their website. The answer to question 9 states that their calculations show that a new planned and emergency hospital on a new site would cost £700M and a new hospital with emergency care but no planned care would cost around £550M. The Trust's slides for their recent on-line presentation covering Green Book and the Appraisal Process shows to 'Do Everything' on all of the existing sites would cost

over £1Billion, a fact that can be easily verified by analysis of the cost estimates for Option 1 and the redevelopment elements in other options in the 2019 SOC.

The abnormal construction costs associated with developing clear/'Greenfield' sites would almost certainly be offset by the proceeds from the sale of the Trust's surplus land on their existing estate after accounting for demolition costs. The value of their existing land is far greater than the cost of purchasing clear/'Greenfield' land with no planning consent.

It is now evident from the Trust's introduction of Site E (WR) – WGH/Riverwell - that Watford Borough Council and Keir (the developers) are willing to exchange the existing Council owned car parking area used by the Trust for land that would become available later within the Trust's estate. This provides a new opportunity for the Trust to retain existing WGH car park spaces on a temporary basis and avoid the need to construct the currently proposed multi-storey car park should an alternative clear site/'Greenfield' option be chosen. The potential cost saving (either by way of capital expenditure or a partnership/leasing agreement that would require the Trust and the public to pay high parking fees) is likely to be circa £30M.

The following Table provides an indicative Value for Money comparison between the £590M Watford Option and the New 'Greenfield' Emergency Hospital based upon the Trust's own capital cost estimate.

Value for Money and Benefits Indicator	Watford Existing Estate plus Riverwell	New Emergency Hospital on Central Clear Site
	£540M (excluding £50M Planned Care Investment)	£550M (WHHT estimate but higher than reflected by actual costs of recent completed comparable NHS projects)
Complete Renewal of Emergency Care Facilities	No	Yes
Totally Grade A Standard	No	Yes
Total 60 year buildings lifespan	No	Yes
Disruption/disturbance free hospital healthcare services during construction	No	Yes
Optimum operationally efficient facilities	No	Yes
Likely on-site construction duration	Approximately 6 years in at least two phases (for partial renewal of facilities)	Approximately 3 years
Building and Infrastructure maintenance	Ongoing and heavy for retained elements	Likely 5 year plus maintenance free period

6. Scoring issues

RFLPS have attempted to apply scores to each of the site options, however the results based on the findings in the Study appear more anecdotal than founded on technical facts. In any event the different findings from this Appraisal not identified or appreciated by RFLPS would significantly change the results. By way of examples, Watford Riverwell (WR) is given 3 out of 4 for availability for completion by 2025 despite the presence of a large sewer, evidence of 'hotspots of contamination' and plans for a school which would complicate blue light access. The whole accessibility scoring is ill founded, using the locality of railway stations alone does not establish a site as being the most accessible and given the many other negative factors associated with the existing Watford site there can be no credibility in the extremely high 'suitability' scores given.

6. Summary

It is obvious from RFLPS's Report that the Trust's entire focus and the scope of the study has been to create a basis to show that the Watford-based options can be delivered by or close to the HIP1 2025 deadline. The study has been carried out paying minimum regard to reviewing the previously considered and rejected 'Greenfield' sites and has precluded new site searches.

Having seen that this objective is not achievable, the Trust is seeking to rely on the Government's original stated objectives to provide funding for the construction of new hospitals that can be delivered by 2025. They are interpreting the requirement such that they would comply with this on the basis of presenting a plan for substantially completing the construction of the main new build element of the two options close to the deadline and completing the balance of works over the following two years. **In doing so they have been forced into preparing programmes based on a high risk fast-track strategy that does not allow on-going due diligence and does not comply with either NHS or any other responsibly founded procedures.**

The optimistic (first phase) completions shown for both of the Watford-based options are unrealistic and, even based on the mid points between optimistic and pessimistic, would mean this stage being reached circa 2027, substantially beyond the HIP1 deadline.

Adoption of either of the Watford-based options would come with a cost premium that would provide extremely poor value for money from the outset, sub-optimal facilities and serious risks of cost and time overruns with ongoing disruption to hospital healthcare services. The comparative costs for 'Greenfield' options, based

upon the Trust's own estimates, are more than 30% lower than redevelopment or overbuilding and can provide much greater cost and time security.

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Robert Scott *Trained as a Quantity Surveyor with a National Construction Company, Marshall-Andrew and qualified as Member of the Chartered Institute of Building, later rising to Fellow with committee responsibilities for 19 years. Progressed career with major regional and national contractors and property development companies to executive and managing director level, serving on a number of boards for over 25 years, including Speyhawk and Higgs and Hill (incorporated within BAM). Project experience includes overseeing new-build NHS hospital contracts at Gravesend, Worthing, Chelsea and Westminster and departmental refurbishments at Roehampton, Croydon (Mayday), Royal Marsden (Sutton) and Hillingdon. Functional experience includes development and site feasibility studies, tender analysis and adjudication, cost planning, client value engineering services, risk analysis and management, risk and opportunity training and executive dynamic project monitoring.*

