

**THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS MET IN COMMITTEE ROOM 2, PARLIAMENT HOUSE, HOBART, ON MONDAY 5 SEPTEMBER 2011.**

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**WELLINGTON CENTRE, 42 ARGYLE STREET, HOBART: FIT-OUT AND AIR BRIDGE FOR AMBULATORY CLINICS**

**Mr PETER ALEXANDER**, DIRECTOR, ROYAL HOBART HOSPITAL REDEVELOPMENT, **Ms WENDY ROWELL**, GROUP MANAGER CLINICAL SUPPORT, **Ms KIM FORD**, NURSE UNIT MANAGER SPECIALIST CLINICS, AND **Mr TIM PENNY**, ARCHITECT, WERE CALLED, MADE THE STATUTORY DECLARATION AND WERE EXAMINED.

**CHAIR** (Mr Harriss) - Thank you. The proceedings of the hearings are recorded and subsequently transcribed as part of the official record of the Parliament and once we report on the project, the evidence we take will be on the web, and likewise the submissions.

**Mr ALEXANDER** - I am going to provide a bit of context because, as you are aware, there is a lot of investment in the Royal. It has come in a number of different funding packages and we are trying to make it all work together.

The operating budget of the hospital is \$380 million per annum or thereabouts. The entire investment in the hospital, with all the different funding sources we have, sounds like a huge amount of money - nearly \$600 million - but in effect it is a bit over 18 months' worth of running costs. The point of that is that any improvements that we can make in the buildings have real opportunities to make great efficiencies in the way we run our business, and as we all know trying to reduce the recurrent cost and the cost of the State budget over time is of prime importance. Therefore what we are putting into buildings gains us a leverage to keep the health system sustainable, and that is really one of our big approaches.

The 432 000 figure is all the outpatients we see. That would include one person many times, and they are not all in the Royal; some of them are home visits and other things. The important point is that we are trying to provide a service across the community and we are trying to limit the way people come onto the Royal site because we can provide services more cost effectively and in a much more friendly and effective way to the community by providing services closer to where people live et cetera and in places that they can get to easily.

**Mr BOOTH** - How do you stack up nationally at the moment on a unit-pricing model.

**Mr ALEXANDER** - To my knowledge there isn't an established efficient cost of providing services at the moment because there are so many differences between States, including transport costs, economy of scale and alternatives. We are very conscious that it will be very hard for us to meet an efficient price of service in a situation such as you saw this morning where so much of people's time is spent simply walking across the hospital.

Whether that is a nurse who hasn't sufficient storage closer to where she works so she is spending time going somewhere else, or whether it is clinical staff moving around, the investment in capital gives us a big chance to bring those things together and make those recurrent efficiencies, but I do not have the efficient prices. It varies so much from service to service, too, and a lot of the emphasis is on in-patient costs, which are the really expensive end of the spectrum anyway.

**Mr BOOTH** - What sort of efficiency gains do you expect for the same procedures? Just say you took what you have done annually now and went forward a year and there was no increase in services, what efficiencies, what percentages; is there a dollar figure? Apart from the obvious that it is a rabbit warren, a terrible working environment, I am wondering whether you figured out whether there is a real dollar saving there in terms of efficiencies.

**Mr ALEXANDER** - It is not a dollar saving. I had the very uncomfortable experience of trying to explain to Treasury my own personal economic concept which I called 'discretionary overcapitalisation'. The difference between us and the private sector is that we are not trying to make a dollar profit; we are trying to improve the capacity. So what we are trying to do is meet extended waiting lists and longer and longer periods, so we are trying to get more throughput without raising the budgets. We are trying to get more bang for the buck, rather than trying to put a dollar on that. That can come back to cost per occasion of service. I do not have that information and it would be different across a range of these but we can provide some of that information if you do need it. It goes back to the Health Plan in 2007 of how we are trying to do that.

**Mr BOOTH** - This component is \$12.2 million; obviously the whole hospital budget is not focused around just these services.

**Mr ALEXANDER** - No.

**Mr BOOTH** - Apart from better service delivery, working conditions and so forth you would deliver a return on that investment in terms of more efficient services being offered and presumably get more income from that cost model.

**Mr ALEXANDER** - There is some income through things like the pharmacist service where there is actually a fee for service but what we need to do is position ourselves to meet the demand for the coming 10, 15 and 20 years. As you can see with what we have now, that is just not going to happen. We are starting to go backwards as we stand and there has actually been a build-up of pressure. Through the period of the investigation of the new Royal there was very limited investment in the existing site because there was an expectation that it would go elsewhere, so it is like a backlog of pressure that we are trying to address right now and it is being done in a number of ways.

We have substantial commencement of stage 1 of the Clarence Integrated Care Clinic. We have funding for Glenorchy and Kingston integrated care clinics, and those are placing a range of services in the community to meet existing demands, to meet future demand and to provide those services more conveniently to people and at a lower cost per occasion of service to see us through the next couple of decades.

**Mr BOOTH** - With those services being provided on that satellite model and the work that you are doing now at the hospital, do you believe it is adequate to meet that demographic change that we are facing and the increased need?

**Mr ALEXANDER** - With the whole amount of money that we have for the hospital in the long-term stages 1 and 3 - yes, it is. When we were looking at the new Royal proposal, there was meant to be an integrated care centre similar in concept to the Glenorchy, Clarence and Kingston models within that. Then there is the ambulatory care centre, which is really what we are talking about now and which is not quite the same thing. This is ambulatory care but requiring hospital-type services behind it. Those were meant to be provided as early stages of the new Royal redevelopment.

The new Royal failed on grounds of affordability, not grounds of service need. So what we are trying to do now is deliver the same level of service which, as I say, has been built through from the 2007 Tasmanian Health Plan, and do it as efficiently as possible at a lower cost and an incremental cost. So we will be staging it, which does a number of things. It meets local industry capacity et cetera so we are really keeping pace with demand and trying to meet the Commonwealth target.

As we stand with the targets that the Commonwealth want to put on us, we still do not quite think we can meet them, but a lot of that is because of the recurrent requirement, the staffing requirements, not the building requirements. These buildings should be able to allow the throughput, and the limiting factor is the recurrent cost, the number of staff and how efficiently you can put people through. In effect the buildings are the cheap part of it, though 'cheap' is not the right word.

**Mr BOOTH** - Relatively to the cost of running it, the infrastructure cost isn't that great.

**Mr ALEXANDER** - No. So we can gain a lot of leverage in terms of throughput by making that efficient. I guess what you saw today was the remnants of an old-fashioned model where the doctor sat in his part of the hospital and the patients moved between the doctors. What we are doing now is bringing patients into a place - it is above a car park, so there is good access - and hopefully it will follow the same type of model as the integrated care centres where a patient gets their details once and then their journey and their appointments are coordinated and scheduled out for them. The clinicians are more clustered around the patients. They go to one place, get what they need, which allows that throughput. The cost of what we actually get out of it is a multifaceted question.

**Mr BOOTH** - Can you deliver - and I know it is only one part of the big redevelopment - the same efficiencies out of this reconstruction that you would if you had a greenfield development? Is it possible to deliver the same?

**Mr ALEXANDER** - Yes, we can at the end of the day. As an argument in favour of this project being off site, in terms of physically building on that operating site we will never get the same value for money, the same number of bricks per dollar, as we would on a greenfield site because from the hours that we can work, the hours that we can make noise or dust or vibration, stopping work to let people through, all those things cost us money. So we are working at a slower rate than we would be on a greenfield site. It is a similar argument in road building. If you can build a new road in a paddock rather than

have the machinery stop work and pull to the side to let traffic through, you will build the same quality road at a cheaper price, and it is compounded in this sort of environment.

**Mr BOOTH** - I understand it will cost potentially more, I suppose, although you do have some buildings that you are reusing so there are less bricks to lay in that sense, but it is whether the unit itself when finished and fully functioning will be as efficient as a new greenfield hospital would have been?

**Mr ALEXANDER** - Pretty much. It is a really important question. A modern hospital site is multiple hectares. Queensland is talking 20 to 25 hectares for a hospital; we have 2 hectares. So the way that we can afford to do it will always require some compromises over an unlimited-budget, unlimited-space greenfield site. There are also cultural issues in that. American hospitals and a lot of Asian hospitals are high-rise; a lot of British and European hospitals are low-rise. The new Royal Edinburgh Infirmary is only three storeys, the Trondheim Hospital, which is put forward as a model case worldwide, is four storeys. There are different ways of managing and it depends on the model of care you use; you can do it either way.

**Mr BOOTH** - Wendy and Kim might want to comment with regard to whether you could deliver the same level of services out of this reconstruction or whether you would be better off with a greenfield site?

**Ms ROWELL** - I think Peter is right. It is a difficult question to answer, though, given that it is a staged approach. We will be able, with the current funding, to achieve a certain level and then we would require funding to get it finalised.

**Mr ALEXANDER** - If I can go through this it might answer that because what I wanted to get to was what the master plan for the hospital looks like and that will show you how it will work.

**Mr BOOTH** - I guess it is an overview question really to get something on the record whether we are doing the right thing by trying to construct something out of what is a dog's breakfast at the moment and create a new modern hospital with the sorts of services we are going to need in 15 or 20 years, whether that is possible out of this site. I would just like that on the record.

**Mr ALEXANDER** - The unequivocal answer is yes, we can do it and we will do it. The other side of the question is if we had the option and the State could afford a greenfield site, that would always be a good option. The reasons it is not a greenfield site are a number of political reasons which go beyond health care itself.

**Mr BOOTH** - Sure.

**Mr ALEXANDER** - In terms of development, developing on a site as complex as this and as busy as this is always going to require some sunk costs and some investment that we will not recoup because there are a number of work arounds and things like that but the offset for that is we can do it in a staged and affordable way. We can do it in a way that Tasmanian industry can resource. When we were looking at the new Royal and in the light of some of the other major developments that were proposed at the same time we had to consider possibilities like running it like a mining camp with flying workforces to

build something of that scale in that time frame. There are a lot of toss-ups which really are now the political issues around the economies of ability to support it.

**Mr BOOTH** - Yes, and that is a political question, as you say, but it is just that I want to know that in 10 years' time or whenever the developments are finished and then in 20 year's time when we are operating the hospital with an increase in people needing the sorts of specialist services and so forth we are going to be able to say that this is a really good hospital, it is delivering exactly the level of health care that a modern community needs and obviously a workplace that is safe and nice to work in and so forth for staff because they are all important. That is really what I am trying to get to.

**Ms ROWELL** - If you have a look through Peter's slides, I think it will answer your question because we have been doing some master planning at the hospital that very key stakeholders have been looking at and we have been involved in that. I think Peter's slides will actually show you what the vision is and where we believe we will have efficiencies and we will meet those demands.

**Mr ALEXANDER** - If I can go through these and then if that does not answer your question then I am quite happy obviously to take more. What we are saying is the hospital is the core but it is not the only game in town for us and that extends to we have rebuilt Ouse hospital, we have upgraded New Norfolk hospital and we have built Sorell and Huonville community health centres. We are trying to interact with the community in the most appropriate and most cost-effective way and the one that works best for the patients.

What we have done - and this is one of the constraints that we have around your question - is when government decided not to proceed with the new Royal we got \$100 million over five years really to keep this hospital operating and we did not at that time have any promise of any other money so we had to target that money to the areas of greatest need and a lot of those projects have come across this committee's purview. After the Federal election last year we got another \$100 million for the women's and children's precinct but no certainty around the other \$365 million. We were told we would have the opportunity to apply for that money and that money was not confirmed until the Federal Budget this year and the State Budget which had to contribute to that, which made our planning quite difficult because we did not know and even in the budgets the governments could not put the cash flows of that into future years, so we have tried to do our master planning in that context of having things that we can build and are stand-alone and are useful if we do not get more funding but do not get in our way if we do get more funding so we do not build something and then if we get more money we say, 'Whoops, that's in the wrong place' and I guess very important to me is that we do not effectively waste money by throwing into a development that much money if we could not then - and that is exactly your question, I think, as I read it - develop a modern, sustainable, efficient hospital that will see Hobart and southern Tasmania right for the coming decades. If we spend all this money and then say, 'Whoops', in five years, we still need a greenfield site', we have totally lost the plot.

**Mr BOOTH** - That is right.

**Mr ALEXANDER** - I will just go through these very quickly. These are most of the stages out of the first State \$100 million. There are a number of construction projects in the top left and most of those have been put to this committee where that is appropriate as of the

infrastructure projects so we need to have reliable power supplies, emergency power supplies, fire detection systems, lifts - as you saw today - all those sorts of things. There is also in the bottom right a lot of equipment - computers and all those sorts of things - and moving people around and those sorts of things and we have had to lease a number of buildings off site. The proximity to the hospital is very important and a key in that and the Wellington Centre is the biggest one of those. The others are all pretty much in place. We have leased some space that has clinics in it elsewhere - other clinics, pain management, diabetes management, things that are more stand-alone - and we are finishing a reconstruction of a kitchen at the airport which was a Qantas production kitchen because our own kitchen was really on its last legs and there is just no way to rebuild it and still produce meals out of it. It the model that Victoria uses having a production kitchen off site that can service various facilities.

Again I will move through this very quickly unless you want to stop me but the green and that bottom diagram is in the submission. That is a kind of map of different places that clinics are and you saw very well this morning. The upper one is where we have inpatient beds which are also spread around. The doctors talk about safari rounds where they can have patients in six or seven different wards.

Again I will move across these very quickly. All that grey stuff is buildings that are over 15 years old. It says at the top under 15 years but they are more than 15 years old. That is meant to be floor-to-floor heights. We have a whole lot of constraints about being able to rebuild the existing hospital. A quote at the top 'an optimal design is one which inhibits change of use least rather than one which meets a specific use best' is referenced back to the World Health Organisation and it is really my mantra. The external of the buildings will last 100 years. The way health is changing, the way we do our business will change. It changes every year but the use of technology like imaging equipment in theatres and all those sorts of things mean we are changing internally. Floor-to-ceiling heights means that we cannot run adequate services. The column grids and low-bearing structures means we cannot move walls around. Fire compliance, spatial efficiencies we really cannot get.

That is a picture of the hospital as it stands pretty much and right in the middle is a little quarter-circle building which we have taken to calling the sand building. What we are going to do with the major project money that we have is build a building like that. We have to span across the other one because there are inpatient wards there and we have nowhere else to put them and we are going up, with the approval of the Hobart City Council, to something like 14 storeys. The yellow is the existing A Block which is going to be rebuilt and be a cancer centre.

The importance of this to what you are talking about - 'A promise' is my final slide - that is in a sense a master plan for the hospital in three stages so the big blue building that we want to build out of the funding we now have; the footprint of that building, the floor area, is enough for a 32-bed ward and a 32-bed ward is nationally recognised as the most efficient to staff. They do it in pods of eight and you get the best ratio of staffing to patients. A lot of wards in the existing hospital are 18 and 19 beds which means that they are effectively overstaffed for the number of patients and they are that size because - and this is very relevant to what we are doing - we have had to crib into the space to put in the clinics, we have had to crib into the space to put offices and other things which means

that we are sort of shooting ourselves in the foot every time we do that sort of thing but we have had no option.

Eventually we will get 64 beds on the ward with two buildings and where they join together in the lower floors the central block that they join into is D Block so we will get contiguous operating theatres. The operating theatres are in D Block and that is the really efficient part. Most modern hospitals have what they call 'hot floors', so all the operating theatres, recovery spaces and medical imaging are all in very close proximity.

Part of what we have to deliver out of this is women's and children's, and this is why I was little bit diffident about answering some of that question. When we only put up one block, and that is all the funding we have at the moment, we have to produce a full women's and children's precinct, and it will take up four floors of that building. We would rather not have it over four floors. Stage 2 is the right-hand of those blue buildings, which is not funded. When we get that money, women and children will be over two floors and directly above the operating theatres and medical imaging. So by the time we get to stage 2, it will be as efficient as any other hospital. Until we get that second stage of funding it will be slightly less, though, because it is over more floors.

The importance of this to the current project is that we are currently building in a leased building, with a 10-year lease and an option to extend that lease. The green part of that is the third stage of our master planning, which will bring all those clinics and things back onto our site. But that is the third tranche of money that we will need and we do not expect it to happen in well under a decade.

We need to get to that stage to have an efficient modern hospital and at that time the white stuff on the left, currently Hobart Private, and the clinical school, we are getting back from the university. What we have done is prove that by investing on that site we can make a hospital that will last us for generations but it is going to take us that long to get there. So this is a very necessary stage to create the ambulatory clinics that we need which help keep people out of hospital beds, but the intended long term is to bring them back on site. Currently H Block is a very narrow building. It was designed to have a couple of extra floors put on top, which is why the plant room is in the lift - to go up higher, but it is not of itself big enough or efficient enough for what we want to use it for.

**Ms ROWELL** - That is where we went to the eye clinic this morning.

**CHAIR** - Regarding the proposal with that first blue extension, how many floors will that be?

**Mr ALEXANDER** - It is about 14. That depends on a couple of things. One is funding and the funding was set before we did that. We have had two national groups of architects independently look at this master planning. The first one looked at it when we put the bid together for the Federal Government and they suggested a building like that, but it was on the Campbell Street frontage and not down the existing building. That has mental health in it, amongst other things, and I would rather see mental health in a low-rise building elsewhere, probably along the Collins Street frontage.

**CHAIR** - Which was only done five or six years ago?

**Mr ALEXANDER** - Yes, it was. I do not think that we will be out of that until we get money which is currently not even on anyone's planning horizon, politically, but eventually, for the sake of the overall hospital, will go. The psychological intensive care unit was done five or six years ago -

**Ms ROWELL** - It would probably have been 10 years ago.

**Mr ALEXANDER** - That was a refurbishment inside an existing building so it was a bit of another work-around. So it will there for 20 years and in 20 years the methods of treating people can change dramatically. The acute mental health, the numbers of people with drug and alcohol problems and related morbidities all change, so it will have paid for itself well and truly by then.

**Mr BOOTH** - How much of the whole site is knocked down when the development is finished?

**Mr ALEXANDER** - Currently there is about 65 000 square metres on the site. Through the new Royal project they determined that a new hospital site should be about 95 000 square metres. That building there is just under 30 000 square metres. The new bits plus D Block and A Block will give us the 95 000 square metres that we need and remember that there is administrative space, education space and other things in there. It is a long time to look but we do not want to have land-locked ourselves into sites so that the next generation of people will say, 'No, we still can't stay there'. We are saying there is still room for additional space on there.

There are some very good reasons for keeping a private hospital on the site if we do have enough space to do it. That is about attraction of high-level clinicians. They can run a private practice and have the opportunity to share some of the facilities and other things.

**Mr BOOTH** - How much of that current 65 000 will be totally knocked down and rebuilt, which obviously leaves the rest as refurb?

**Mr ALEXANDER** - What we are trying to do is minimise the refurb so what will be knocked down is B and H blocks. I don't have the figures for those because we are not looking at doing H Block for at least 10 years.

**Mr BOOTH** - And the ones that are refurbished?

**Mr ALEXANDER** - We are trying to minimise the refurbishment because of inherent issues of column grids, ceiling heights and things like that.

**Mr BOOTH** - So where you build over that it will ultimately will be demolished?

**Mr ALEXANDER** - That will come down. Under the next stage it comes down and we build back down to the ground. We have to move the people out of it and the only place to move them is up into the new building, but it is recognised as being much more efficient to replace a building rather than refurbish it, particularly for things like energy efficiency. Spatial efficiency is one thing but you just never ever get the energy efficiencies and the systems into a refurbished building that you can get into a new one.



**Mr BOOTH** - Mind you, there is a fair bit of embedded energy in a constructed building.

**Mr ALEXANDER** - Very much so, but we managed that. What we are looking at is a balance. We are very ESD-focused. Other than South Australia, no health jurisdiction in Australia is looking, for instance, for green star ratings because a lot of those ratings put a skew on some of the things that you might want to do. In Tasmania regarding the use of recycled materials and those things, we do not have a commercial market for some of those things. There is a lot of focus on water reuse, which is not necessarily as important to us as it is to some other jurisdictions. We will be doing a lot with water on the site. There is a very nice and valuable connection between things like energy efficiencies, managing your recurrent costs and a wellness or healing environment. There are green plants which can help scrub your air. There is a lovely plant called mother-in-law's fingernails. It is quite spiky and is used commercially for air purification. Those things actually work together for us.

**CHAIR** - With your specific design for the Wellington Centre, it would seem pretty likely that you will take up the four-year option for a start at the end of the 10, and most likely beyond that.

**Mr ALEXANDER** - It depends entirely on government's capacity to fund redevelopment on site.

**CHAIR** - If the redevelopment eventuates, as your planning would suggest, then you will not need the off-site Wellington?

**Mr ALEXANDER** - No. In current thinking it is stage 3, so stage 2 would replicate the blue building and that would give us all our inpatients in that so all the beds would be in there, all the medical imaging, ICU, operating theatres, women's and children's, all that clinical inpatient stuff would be in the blue areas and the yellow cancer centre. Cancer is growing exponentially in its amount of space because people are surviving cancer so they are continuing to be clients of the cancer centre for decades whereas in years gone past the mortality was much higher so it did not take as much space.

**Mr BOOTH** - You are having a consistent flow of clients then, aren't you, by saving them?

**Mr ALEXANDER** - Yes, that is the thing about health.

**CHAIR** - With regard to your financial arrangements with Sultan Holdings and the fact that you have elected prepay some rental, did that come with a discount in recognition of Sultan Holdings getting money up-front for rent?

**Mr ALEXANDER** - We have asked Sultan Holdings to put in a much higher level of mechanical and electrical services than would have been required and -

**CHAIR** - Or provided by -

**Mr ALEXANDER** - Certainly more than would have been provided if they had built as an office building. They have taken a commercial risk on some of those issues like over-sizing lifts and things. We have asked for higher standards of airflows and fire detection and things like that. To do that we are intending to provide an up-front rental payment.

That is still subject to negotiation because it depends on our tender price as well and if we cannot afford to do it, and it is our option to do it, then we need to complete the tender obviously. It does not come with the discount as such, it is pretty much par for the course. Over 10 years, depending on what discount rate you use for the net present value calculations, it is within \$50 000 one way or the other.

**CHAIR** - So that if, as the document suggests on page 21, the actual construction tenders are a bit more than you had envisaged, you will not be making a prepayment rental?

**Mr ALEXANDER** - There is no requirement for us to make a prepayment rental -

**CHAIR** - No, it is your choice.

**Mr ALEXANDER** - but if we do not, the annual rental will go up and by paying up-front if we can and reducing the rental, it helps us with our recurrent target over the next decade.

**CHAIR** - Given that that \$1 million is factored into the \$12.2 million which we are considering today, if you do not contribute that as an initial rental contribution, if there is a need, would that then be diverted to building costs?

**Mr ALEXANDER** - It would go into the fit-out costs. We cannot compromise the fit-out costs. They have been gone into and my colleagues will go into those in some detail and there are really no luxuries in there so if we get a high tender - we are hoping we will not because it has been costed well, and when I say 'hoping', it has been costed as well as we can - then we would have to wear a higher rental cost. One of the practical issues behind that is we did look at having the owner build mechanical services to the standard he was going to and then us building additional mechanical services as part of the fit-out but, needless to say, there was a lot of duplication and things that would not fit and things that would have to be redone in the construction but as well as that, throughout the occupation of it when the present corporate knowledge goes, I think there would be continual arguments about whether it is his fault or our fault or whether we get a rental abatement or who is paying so it makes much more sense to ask him to provide the mechanical services; he carries all the risk and the maintenance liability for them. We get a reduced rental of that and it is a much more practical option.

**CHAIR** - Keep going, Peter, thanks.

**Mr ALEXANDER** - That is the end of the presentation that I wanted to give which I had hoped showed how the Wellington Centre would fit into the overall plans of the redevelopment and how it is funded and it is part of an overall system. Those first numbers that I gave you show that we have something like 5 000 people a day wandering around something that is going to be a building site for a decade, and the more of those that we can take to other places, the clearer run and therefore the better value for money we get out of our building projects as we get up there, as well as a better outcome at the end of the day.

**Mr BROOKS** - As the director of the redevelopment, you are obviously fairly happy with it?

**Mr ALEXANDER** - I am very happy with it now. The new Royal was absolutely daunting and it got up to a cost of something like \$1.8 billion and they didn't know if Tasmania

had the resources to build it by 2014, and because we were putting all our eggs in one basket, we were building something in one chunk that had to last forever, and if we got our predictions wrong then we had a major problem.

I think this is a much more Tasmanian-scale of project. If the world changes, if somebody invents something that means we can use a pill instead of a surgical procedure, we are always going to need the number of beds in stage 1, and we have the option of changing subsequent stages. But we have a good plan, and what really pleases me is that this does, in answering Mr Booth's question, give us confidence that we can stay on that site and have an efficient, modern, operating hospital on that site for decades and decades to come which, during the new Royal process, was questionable.

**Mr BROOKS** - With the demand on certain services, especially, unfortunately, cancer services and things like that, is there room for expansion if we find that with our ageing population we have a significant increase in the next 10 to 15 years in patients?

**Mr ALEXANDER** - There is. Currently cancer is only on the bottom two floors of A Block - and some of it goes into B Block, I think. Cancer will end up with all nine floors of A Block, and that includes the day chemotherapy. There will be a big expansion of people who are not inpatients anymore and people who are in recovery phases, and the cancer centre will eventually have a whole floor of what is called a wellness centre, which is where people can de-stress and receive education, and those sorts of things.

There is a model in Britain called the Maggie centres, and they tend to be close to but not in the hospital. So it is one of a number of things where we are building in some expansion capacity. So we will build it into the hospital and if in 20 years we need another floor of chemotherapy chairs, that can be pulled out and put somewhere close. In Launceston it has been built across the street. There are some advantages - people say, 'I'm not in the hospital, I don't want to hear another machine that goes "ping", I can just make a cup of tea and relax a little bit but still be very close'. We are building in a lot of what they call self-space like that, really useful space, but if we had to take it out to expand something that is more necessary, we have that choice.

**Mr BROOKS** - We did see the rabbit warren and I must admit the first time we went there, which was earlier this year, I was surprised at how poor a condition it was in and when we recommended the project I don't think anyone disagreed with it.

The time frames that have been given, are they the right time frames - are they achievable but still efficient? Is it being done as quickly as possible?

**Mr ALEXANDER** - It is being done as quickly as possible. To have got from a mind state across government that we were going to go with the new Royal to a master plan that we had confidence in, which is really through the process of the HHF funding submission last year, was an extraordinary process, it really was. Having done that - and we had a little bit of a hiatus because we had no confirmation of that funding until the Federal Budget in May this year and we did not get written confirmation of it until June this year - it has been a very quick curve. There is a lot of things happening in the background. This week we have the third of four master planning workshops on the overall project, which have a lot of the clinical input. All the senior clinicians are coming

to those. They are all on board, all in the room together and there are no major conflicts of people saying that this does not suit them or meet their needs or anything else.

With the form of contract that I intend to use - and I need a final sign-off for that - we have to stage it. We cannot wait until we have designed it down to the last door handle for a project of that size before we start building it, so we will start and have a contractor engaged and be underway with construction by mid-next year. The State funding finishes in the 2014-15 financial year - so 30 June 2015 - and the Federal funding finishes 30 June 2016. We are planning to have the building up and finished by Christmas 2015, the whole of stage 1, and that is obviously not the Wellington centre; it is a lot faster than that. We have had significant discussions with industry, consultants and others and that is all doable

**Mr BROOKS** - What about, with all due respect, the rank and file, from the cleaners to the orderlies? Have they got a general idea of what is going in and where their little space will be and things like that?

**Mr ALEXANDER** - Very much so.

**Ms ROWELL** - Are you talking generally in the redevelopment or in the Wellington Centre?

**Mr BROOKS** - Generally as well as the Wellington Centre. We found in King Island a couple of issues around part of the design where it was not consulted with the one who has to get the stuff out.

**Mr ALEXANDER** - In the general project, even at the master planning level, as I say, this week we are having the third of four master planning workshops. That includes all the senior clinical people, a cross-section of people through the clinical areas, engineering people, the hotel services people who manage the cleaners, the orderlies and everybody else. It talks of car parking and administrative offices. There are big debates, for instance, around whether certain groups of clinical people should have their office space with their clinical space or whether you bring all the different clinical disciplines together for their offices because there are interactions between a lot of those things.

**Mr BROOKS** - To decentralise or centralise.

**Mr ALEXANDER** - Yes, those sort of debates are everywhere and they are very active debates. We are encouraging people into those. Below those master planning workshops we have a series of project control groups and a series of user groups which brings those in and then they come up to a steering committee which is chaired by the CEO. There is another coordination committee so it does bring all those things together.

**Ms ROWELL** - As well as the master planning workshops we also have 'models of care workshops' at the moment around clinical need. We are conducting those with food services and cleaning and all of those people involved in what their requirements are in the clinical space and where they actually provide those support services in their department. The plan is to get everyone involved in it and the CEO has forums around telling people what they are up to in the redevelopment and what we are planning on doing.

**Mr BROOKS** - I did see there was some information around the hospital, with stages, time lines and things like that. Obviously everyone cannot be satisfied with every single thing but it still has to be practical, too.

**Mr PENNY** - Specifically with the Wellington Centre there are individual user groups across all the different floors and they have been consulted extensively at every step through the process. It has been led primarily through Kim at a clinical point, which has translated into the architectural brief. So overall concern about functionality, operation, design and all those sorts of things have been extensively consulted.

**Mr BOOTH** - Kim, will this work perfectly for what you need or are there deficiencies inherent in the design at the moment that you would like to see fixed?

**Ms FORD** - No. As Tim has said, we have spent a lot of time looking at workflows, doing the patient journey, as we did this morning, looking at how things will move through the system. Along the way we have moved some of the utility rooms and treatment rooms to make it more efficient and better suiting that patient journey.

**Mr ALEXANDER** - I think you will always find discussions between people wanting private offices against open-plan spaces and this model brings some of that together. There are other people who have overviews, such as the infection control people, whom we bring into that, too, because sometimes they have a slightly different view from an individual clinician. We have brought all those people together to the greatest extent possible and I do not think there is any great dissent. Occasionally there are people who would rather have their own office than share an office.

**Mr PENNY** - I think it is worth elaborating on that. It must be said that we are fitting into an envelope that has been determined by the developer. That is designing from the outside in, so you have to get the functional relationships right. There are some clinical relationships between, say, optical and audiology, so there is a need for co-location. We have the limitation that each floor has a certain area. The other limitation is on levels 1 and 2, where they are reasonably narrow spaces on the buildings that are immediately fronting Argyle Street. In a perfect world, if you were designing those as a new building you would have them as a square space so that it is more effective. That was simply a limitation of the existing space.

**Mr BOOTH** - What is the design life of the parts that you are building at the moment - the materials, electrical and plumbing and all that sort of stuff?

**Mr PENNY** - The department has guidelines such that any external envelope was up to 100 years. Services are up to 20 years and generally all internal partitioning has a design life of 15 to 20 years.

**Mr BOOTH** - So the services are easily replaceable?

**Mr PENNY** - Yes.

**Mr BOOTH** - They are not cast into a slab or whatever.

**Mr PENNY** - Again, we have had the opportunity of being able to talk to the developer as we are going through this design process, which has offered some efficiencies. The hot water, for instance, which was initially electric and distributed throughout the building, has now been redesigned as a single plant on level 13, which has reticulated gas. It is not only more cost-effective but also smarter energywise.

**Mr BOOTH** - Do you have an energy star rating on hospitals at all? Are you trying to achieve energy efficiency in terms of retaining heat and the components there?

**Mr PENNY** - The external envelope is being determined by Sultan Holdings and we are fitting within it. When you are doing energy modelling, a lot of the significant inputs are in the design of the external façade. To answer your question specifically, it is not designed to a green star rating but it is equivalent to a five-and-a-half star rating. We have had some inputs to Sultan Holdings to upgrade to double-glazing with quite a lot of thermal efficiency for external glazing. There has been redesign of the mechanical services, so it is a very effective model. In terms of fit-out, obviously the two key components are what goes on the floors and ceilings. We have re-specified a ceiling tile that has a rating in. They are manufactured from recycled materials but can also be recycled, and the same with the floor finishes.

**Mr ALEXANDER** - T5 lighting?

**Mr PENNY** - Yes, absolutely. Well, it is better than that because it is fully programmable so for the life of this building those spaces by simply reprogramming them changes your functionality of the lighting rather than having to go back and pull out wires and switches and redo all that. It is a Dali system.

**Mr ALEXANDER** - There are some Federal Government standards on green leasing and it is a conversation with industry which is really government using its buying power to say, 'If you want to lease to government, we want you to build your buildings', because we have limited say over them, 'to a standard which allows us to do that'. Because we have been working with the developer on this, as Tim said, we have been able to have significant influence, including double glazing which the owner did not want to do. In terms of benchmarking, I work with my colleagues nationally and it is extraordinarily difficult but we are working towards trying to get benchmarks for energy usage either per square metre or per patient day or those sorts of things but because there is such a variety of climatic conditions and building ages that also makes it difficult to benchmark internationally. The Americans do a lot more airconditioning than the Europeans, for instance, and all of those have impacts. In some ways it is as useful to benchmark and try to improve your own performance as it is to try to balance against someone else but we are developing efficient benchmarks for water usage, maintenance costs, energy usage, et cetera.

**Mr BOOTH** - Are you going to look at solar hot water which is a pretty efficient way of harvesting energy?

**Mr ALEXANDER** - I have not been so close to this project but we were very proud on Bruny Island where we have actually generated our own capacity on-site and that won an award as an environmental award which we were very, very proud of, particularly against

the funding constraints we had there and I think that demonstrates a commitment to try to get those things right.

**Mr BOOTH** - Why weren't they transferred to this building then? Bruny Island is not part of this project so you have an example where you are proud of it and it has worked, why aren't those components in it?

**Mr PENNY** - The modelling was that gas gave us the better solution and bearing in mind that the department is not the only decision-maker in that process as the developer has a role in saying what his model is as well.

**Mr BOOTH** - So when you retreat from that with the whole development then I guess you have the option of putting other more efficient energy-consuming or less energy-consuming water-heating systems.

**Mr ALEXANDER** - When we come into our own property?

**Mr BOOTH** - Yes.

**Mr ALEXANDER** - Yes, we have specialist ESD consultants working with us on the new site across a whole range of areas, which includes consideration of embodied energy and things like that. This one is a leased property so the capital cost, the rental cost, et cetera, are important to us and one of the major costs that we have avoided in this is whenever you lease a property there is what they call a 'make good' clause. Even if you improve it, at the end of the lease the owner can require you to take out all your improvements at your cost and in a lot of the commercial world they will say, 'Write me a cheque and I won't make you do that'. He then on-leases it to someone else and does not do anything but he has made a cheque. There are no 'make good' clauses in this so we have had to work with them, so we do not have to pay for the cost of our fit-out at the end of the day of removing things that we have specified to the builder.

**Mr BROOKS** - On that, you mentioned double glazing that the developer did not want to do. Have you had a win there?

**Mr ALEXANDER** - Yes, we have. These guys know more about that than I do.

**Mr PENNY** - When we did the initial modelling it showed that the west and the northern two parts of the facade were at high risk of solar loading and so we started dialogue with Sultan Holdings very early on in the piece. They had single glaze with a reasonably low shading coefficient but they took it upon themselves to upgrade both to a higher shading coefficient as well as to go to double glazing. They initially only had double glazing on the southern side.

**Mr BROOKS** - What about your heating and cooling through there? You mentioned the American systems are generally higher in heating and cooling and Europeans are less - ducted, I presume?

**Mr ALEXANDER** - I was talking for our site, generally. The Americans use deeper building footprints and that requires a lot more ventilation and air-conditioning. I was talking about that generally in terms of trying to benchmark energy usage.

**Mr PENNY** - Specifically to the Wellington Centre, it is fully air-conditioned. If you look on page 17, it talks about variable refrigerant flow, and that really is talking about rather than having a single plant, like on the current hospital with chillers and those sorts of things, it effectively uses heat pump technology which gives you a high level of being able to zone, but with it goes energy efficiency because of the capacity for the zoning.

**Mr ALEXANDER** - There are, and again I am talking in general terms, other considerations. One of the things we have been looking at in the major building again is chilled beam technology. Part of that is because we have narrow floor-to-floor heights and instead of great big air ducts, you can use small pipes and move iced water through the building and then have a radiator which provides a cooling in the room, basically. But it starts to have a major effect on infection control because of the radiator in the room. They are really hard to clean, you can get dust build-ups, mould spores growing on them, et cetera. Again in health care, every time you think you have come up with a solution, there is a balancing factor that we have to come across.

**Mr BROOKS** - The one question I have is - you are taxpayers, no doubt - is this a good investment of taxpayers' money?

**Ms FORD** - Given that I am a taxpayer, and I am likely to be a consumer in years to come, yes, I think it is.

**Mr BOOTH** - You reckon it is a good investment?

**Ms FORD** - Yes.

**Mr BROOKS** - Do you think we are getting a bang for our buck?

**Mr ALEXANDER** - Yes, I am sure that we are. That question has to be answered in the context of what are the alternatives. Going on with what you saw this morning is not a viable alternative, we are getting further and further behind the eight ball and we simply cannot squeeze more efficiencies out of the system, simply because of the distances people are travelling and how many people you can physically put through the system. So moving to this, if we had enough money to build our own facility that was close enough for the clinicians to be able to travel between their inpatient and other duties and across to clinics, then perhaps - or another way, if we did not have all the constraints that we have around us. But for this to be so close, going west is the only way we can go. We have the Theatre Royal to the east, we have heritage buildings north and south, so to be on there, to get efficient use from our clinicians, to change the system and bring in modern models of care so that we can have patients come and be treated efficiently, with dignity, privacy and all those other things, to have the capacity to run for the next 10 to 15 years - looking back to what we spend per year on running the hospital compared with the capital investment - then I am absolutely convinced that this is a good use of taxpayers' money.

**Ms ROWELL** - Kim spoke this morning about going to a conference tomorrow around outpatients. She and I went to a conference a couple of years ago - the same conference - and they produced a number of very enlightening papers around models of care for patients and we came back very excited about doing all these things. For instance, there



are ways where you can run clinics where there is a doctor in one room, there might be a nurse running a clinic for those particular patients as well, and then some allied health people doing some work, so a physiotherapist might work alongside an orthopaedic surgeon, for instance, in seeing patients, doing some work with them, conferring with them.

We came back hoping to put a lot of these models of care in and whilst we have achieved some of those, because of the space limitations, we are unable to do a lot of that sort of work. So we have clinicians already who are able to do that type of work but what happens is that the patients have to come back to see them, they are unable to see them on the same day, at the same time and be able to get that advice, and instead of having one trip to the hospital they have multiple trips.

**Ms FORD** - And the limited consulting space has actually led to inefficiencies, to little clinics popping up across the hospital and not having a centralised model where you can deal with the flow of patients and create efficiencies. There are bits of out-patients all over the hospital and that has been historical because we have run out of space. Our waiting lists are going to get longer with the chronic disease burden in the ageing population. If these all these cancer people live longer then they are going to get chronic illnesses as well so there is a double-whammy from that one.

**CHAIR** - We heard while we were on the site visit that there is currently an inefficient use of the existing capital equipment in terms of operating hours. Is there an intention in moving to this new facility to expand the operating hours and therefore be more efficient with the use of the capital equipment - which is all, from what we saw, contemporary enough to be transferred to the new facility?

**Ms FORD** - There are a couple of issues there. One is getting the clinicians to agree to do earlier or later extra shifts; the other is a resourcing issue around nursing staff and scheduling staff. If you bring on an evening clinic or a later clinic or a weekend clinic then that is going to increase your human resource cost, so you would have to look at how that could be funded.

**Ms ROWELL** - There are some private clinicians, allied health as well as medical staff, who we believe are interested in using those facilities and conducting their own clinics. We actually see that as revenue raising.

**Ms FORD** - Especially a GP clinic and that would help decrease the burden on the ED department. Category 4s and 5s, the lower end of the acute presentations, could be sent over to a GP clinic that could run there after hours. That is one of the models that we have been exploring with GP South - the local GP division.

**Mr ALEXANDER** - As I said, the buildings are there to support the service. We could not extend what we do in this hospital for a number of security reasons, for instance, with the low staffing levels at night, having people wandering independently through the hospital where there are big empty spaces. We cannot supervise them and other things make that impossible. In this facility, the facility can cope with that because it is a dedicated facility. It has its own lifts that go nowhere else. It is designed so that there are areas that the public can get to, like the waiting rooms. They can be invited into the clinics, and areas that they cannot go into would be closed off. So the question becomes a

government resourcing decision around staffing numbers and recurrent funding, but the building will have the capacity to cope with exactly what you are saying, whereas with the current building you could not do it even if you were given the money.

**Ms FORD** - We did talk this morning about the reasons we put the various services or specialities on floors together - so that we could have an efficiency around co-located services. There was a lot of thought given to how we would fit them in and who would go where.

**Ms ROWELL** - We put an expression of interest out when we knew about the availability of the Wellington Centre for clinicians, asking them if they saw some benefits of going over there. They talked to their colleagues about where their best fit would be and with whom and then put together submissions.

**Ms FORD** - So anyone from the hospital who had an interest in going to the Wellington Centre put in an expression of interest. That included some other areas like podiatry, speech, lymphedema and some other outpatient areas, and a group of clinicians made a collective decision about who should go over there. So it was part of the process we went through to make sure that everyone was in agreement about what should be there.

**Ms ROWELL** - And to make the most efficient use of the space and location.

**Mr BROOKS** - And casualty?

**Ms FORD** - No, like endocrinologists, rheumatologists, general physicians, diabetes.

**Mr BROOKS** - Just specialists?

**Ms FORD** - Yes, specialists.

**Ms ROWELL** - Like cardiologists, respiratory physicians.

**Mr ALEXANDER** - There are a lot of design principles in there, too, that we have developed over many of the projects we have done. We talked about having graded areas without hard security or impediments that annoy people, places where people can wander at will or by invitation. A lot of those consulting rooms have separate egress, which is a requirement if there is a duress situation where a clinician can back out a separate way; they do not have to go past an aggressive person to get out. There are places where we can improve professional interactions. There is a professor in America called Frank Becker who makes his living out of telling us about corridor conversations and the professional interaction that happens in the tearoom. So we are trying to gain the benefits out of corridor spaces where there are write-up areas and areas for professionals to have conversations where they are not in a public corridor and can be overheard. There are a lot of those issues incorporated in that design.

**Ms ROWELL** - So what you saw today in the orthopaedic clinic, where we were standing and there was a gentleman being seen in the consulting room, will not happen in the Wellington Centre because the doctors and nurses will be able to go elsewhere, away from where the patients are.

**Mr PENNY** - My closest analogy would be that the planning there is like a spinning wheel in that the centralised activities with clinicians and delivering the service is in those rooms, and on the public site people can come and go quite effectively and efficiently in a pleasant environment, whereas what you saw today is like a cone, where all the circulation is along a big spine; everything happens in that area and it is highly inefficient.

**CHAIR** - Thanks folks.

**THE WITNESSES WITHDREW.**