

## **PROCUREMENT AND RISK SHARING**

### **Case Study**

#### **LYELL MCEWIN HEALTH SERVICE REDEVELOPMENT STAGE A**

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Delivering a significant hospital project without a project manager and using a relationship contract.

An abstract that explores the achievements of an approach to major project delivery where the owner agency and procurement agency worked together to create an environment where better than usual outcomes could be achieved in the delivery of the \$91.4M Stage A redevelopment of the Lyell McEwin Health Service in Adelaide's northern suburbs.

#### **LYELL MCEWIN HEALTH SERVICE REDEVELOPMENT**

The Lyell McEwin Health Service (LMHS) at Elizabeth is one of South Australia's major acute hospital facilities. It had comprised a range of old and newer buildings with almost 50% of existing floor space greater than 40 years old. These buildings were dysfunctional, costly to maintain and no longer met the health requirements and health service delivery models of current practice.

In February 2000 Cabinet approved \$87.4m expenditure on the LMHS Redevelopment Stage A. The budget was later increased to a total of \$91.2m. Stage A has replaced the great majority of the outdated infrastructure and provided two new wards, CCU, Women's Health Centre, administration and education, CSSD, new emergency, imaging, ICU, HDU and operating theatres.

## **WHAT WERE WE TRYING TO FIX?**

At the commencement of the Redevelopment Stage A project at LMHS, the Department of Human Services (DHS) and the Department for Administration and Information Services (DAIS) assessed the characteristics of the LMHS Stage A project and noted that it:

- was the largest single construction project stage being undertaken by DHS;
- was a project of high strategic value for DHS, the northern suburbs and Government;
- had a potential for providing significant economic benefits for the northern suburbs over a period of five years or more;
- needed the flexibility to accommodate changes in service delivery during the life of the construction (has occurred in regard to emergency, mental health etc);
- needed outstanding management of program and cost;
- justified significant focus on environmentally sustainable development (ESD) and building industry training initiatives.

Our experience with other such significant major projects, consistent with the experience in the private sector and nationally had been that in conventional delivery there was often:

- lack of consultant team cohesion;
- combative contractor and consultants/client relationships;
- poorly coordinated or incomplete documents;
- quality control concerns during construction;
- inadequate management of variations ;
- consultants working in a siloed, defensive culture.

Given the risks and opportunities profile of this very significant State government project it was decided that a relationship form of procurement (utilising a collaborative contract) would be used. In the past it has been perceived that high performance organisation principles could not be transposed into the building project arena but the experience at the National Museum in Canberra and then the Adelaide Convention Centre Extensions project showed that they could be and there are significant benefits from doing so.

## **WHAT WERE (ARE) OUR EXPECTATIONS OF THE RELATIONSHIP CONTRACT?**

We believed the relationship approach would provide better opportunity to realise the significant opportunities that the project offered and also mitigate the risks by

- establishing the project team with equality of input and common objectives to manage all aspects of the project pro-actively with progressive negotiation/management of all project issues;
- expecting the project team to manage the project rather than a project manager;
- encouraging innovation and problem solving;

- setting objectives in addition to quality outcomes in design and construction including ESD, community relations and building industry training;
- offering performance incentives in support of key project objectives
- investing in team skilling and training in the relationship approach and in establishment of the right team culture;
- inclusion of the subcontractors in “The Team”

The implemented relationship contract was designed to establish a cohesive team including DHS, LMHS, DAIS, consultants, contractor and subcontractors with common objectives and shared accountability.

There were potential disadvantages identified as part of making the decision to proceed with a relationship contract and they were:

- relatively new approach with a “Leap of faith” required;
- expectation that project manager was required for success;
- complex briefing and tendering processes;
- greater investment in management and professional fees;
- no certainty of improved outcomes and difficulty in measuring improvements;
- if there was disputation it could be more serious than in a conventional approach;
- established project management practices could be compromised by the focus on new practices;
- the risk and reward arrangements are not well accepted by some sections of the professional community.

However we were confident that through engaging with the team in an open and consultative way, supported by JMJ in a coaching role, any concerns could be worked through and additional up-front costs could be made cost effective by the end result.

### **WHAT PROJECT OBJECTIVES DID WE SET?**

Consistent with most major projects it was important to achieve time, cost and quality objectives in the project but the opportunity was taken to broaden those objectives given the very significant capital injection by the Government into the project. The key objectives were:

- achieve maximum value for the capital cost;
- achieve completion on time with minimum disruption to the operating environment; and
- deliver high quality;
- produce a new benchmark in Ecologically Sustainable Development (ESD).
- provide building industry training. The South Australian Government had a training initiative called Upskill SA in place but additional expectations were placed on the consultants and contractor to use the project as an opportunity to provide trainee, apprentice or work experience opportunities on site.

- achieve defect free completion. There was an obligation on the managing contractor to plan for and implement a regime of continuous inspection of the works to progressively identify and rectify defects. The advantage for the hospital would be an occupation process unencumbered by a requirement to continue to allow access to the contractor/subcontractors to address unfinished or incorrect construction items.
- develop community relations. The local community had become disillusioned with the state of its hospital and did not have the ownership of it that would be ideal. The project was seen as an opportunity to engage with the community through the design and construction process to rebuild ownership and interest.
- achieve outstanding results in industrial relations and workplace safety;
- demonstrate to the South Australian building industry that an alternative approach to project delivery was effective and in the interests of all stakeholders

### **SETTING UP AND MINDSET BEFORE WE STARTED**

The contract was developed using as its basis the C21 Managing Contractor contract designed by the NSW Department of Public Works and Services modified for use in South Australia by DAIS and Crown Law.

A decision was taken not to engage a Project Manager for the project as it was seen that the usual hierarchical project management role was inconsistent with objectives of the relationship contract and equality among all stakeholders. It was agreed that funding set aside for the Project Manager would instead be committed to team development, training and coaching.

DHS and DAIS were supported through the tendering process for the managing contractor by the collaborative consultant JMJ and Associates (JMJ). Amendments to the already in place consultant contracts were also developed such that the team had a common set of contracts that incorporated previous contract commitments. By agreement the arrangement for a primary consultant contract was varied to direct contracts with the engineering consultants to ensure that all consultants had an equal say in decision-making.

Then with the appointment of the managing contractor, JMJ worked to gain team commitment to adopt a change in the way the project would be managed and to develop a collaborative approach to decision-making and problem solving. The JMJ coaching and development process developed team member skills in:

- listening and the pitfalls to achieving genuine understanding between team members;
- the fundamentals of achieving sustainable agreement (alignment) and commitment to team decisions on technical and management issues;
- the ability to communicate with a view to creating solutions, or tabling issues with clarity;
- real accountability for what each person says and the actions promised; and
- the responsibility to act in a positive and multiplying manner which addresses the expectation that a team working as one should be able to create more than a team working as a set of individuals.

An incentive process was developed by the project team in a workshop environment to act as a driver for high performance. The incentive was due to the Managing Contractor and Consultants on successfully achieving the five key project objectives-time, cost, training, ESD and community involvement.

### **WE HAD A LONG WAY TO GO:**

As JMJ commenced the process of team development a number of issues came onto the table. SA generally has not had the disaster projects or the high levels of litigation that have been experienced elsewhere. Some in the existing team felt they needed no change and were wary of the relationship approach and whether or not the role of JMJ was adding value. Some viewed the investment in this form of risk management as wasteful others viewed it as an impediment to getting on with the work of design and construction effectively.

Initially there were several times when team members held back from taking responsibility for issues traditionally managed by a Project Manager. However over the first few weeks the team became accustomed to not looking to a Project Manager to fill in any management gaps and instead assigned responsibility to the person or group best able to manage the issue.

Senior bureaucrats and members of the Government were cynical about the “no blame” approach, having had more experience with “combative” contract forms. Some were wary of experimenting on such an important and significant scale project.

The degree to which individuals initially grasped and implemented the required higher levels of interpersonal skills varied but over time the culture of the team has changed substantially with these skills now evident throughout the team.

### **HOW DID WE GET GOING?**

DAIS is a committed leader in the building industry in SA and DHS, with the largest capital investment program in buildings, is a leader in delivering an expert client role on its projects. We consulted interstate and reflected on the lessons learned from the Adelaide Convention Centre Extensions project.

The existing consultant team was engaged in the tender process for the relationship consultant with the result that JMJ, a specialist consultant was appointed ahead of other tenderers which were generally project managers offering a relationship approach.

We drew on the experience of JMJ on many relationship contracts in the civil and building construction areas and designed the Managing Contractor tender process to commence team culture change. JMJ excellence through facilitation of the process was critical in “proving” the need for relationship consultant to some team members.

### **THE KEY BUILDING BLOCKS AND MAJOR LEARNING**

The key building blocks as the team embarked on the delivery of the project were:

- a vision and objectives we all owned;
- everybody “throwing their hat over the wall”;
- training to recognise our own non-collaborative / disempowering behaviour;

- identifying process champions
- discovering advantages of respectful plain speaking and acknowledgment of achievement;
- recognising that the project team included subcontractors as well;
- making key trades value based appointments.

Under the coaching of JMJ, the leadership group in the team became focussed on team empowerment; recognising key leaders and their needs for skilling, support and empowerment. A culture of anticipating how observations or opinions “were going to land” with others grew because it was recognised that it was easy to disempower people without awareness and sensitivity. When the Executive Leadership Team (Steering Committee) and the Integrated Management Team had difficulty finding balance between governance and empowerment the newly learned skills allowed the issues to be resolved effectively.

### **PERFORMANCE AGAINST OBJECTIVES SET**

Achieving maximum value for the capital cost has been a significant success on the project. The construction contingency expenditure was only 2.5% from an allowance of 5% which has meant the release of \$1.7m for additional work and an increase to the Furniture Fittings and Equipment fund.

While there has been excellent results in regard to minimising disruption to the operating environment, as the project progressed it became clear the optimum management for best project outcome meant balancing time, cost and quality and there has been an acceptance that time will under perform to ensure outstanding results in quality and value. The project was 16 weeks later than planned after encountering Latent conditions and a significant EBA bargaining period.

The quality of the facility was generally exceptional and there were some areas such as the cabling systems where outstanding outcomes have been achieved. Feedback after several months of occupation was very favourable. There was an exceptional and collaborative work relationship between the project team and the hospital in commissioning the project, which supported the hospital in implementing the change management opportunities that existed within the new facilities.

In regard to the ESD the objective was the to be the most energy efficient hospital in Australia and:

- waste minimisation has achieved outstanding results including non-toxic demolition waste 100% recycled
- industry benchmark achieved for construction waste;
- energy efficient facades with high performance glass and all living space with natural light incorporated;
- sun shading doubles as safe access for cleaning and maintenance;
- solar availability maximised with solar hot water reducing energy consumption by 10%
- best practise building automation system installed.

The project has supported significant numbers of work experience students and worked with the local training authorities to provide traineeship opportunities. Graduates have also been given opportunities through the managing contractor and consultant groups. Upskill requirements have been exceeded and there is full safety training “Greencard” compliance. 41 traineeships and 29 work placements (including 10 long term unemployed) and 1 full time apprenticeship were offered through the efforts of the team.

The hospital staff and the subcontractors particularly appreciated the defects free completion in regard to minimising returns to site for rectification work.

After a series of initiatives to hold information forums, develop a website and publish newsletters along with Lions run bar-b-que events on site and several milestone celebrations, community awareness of the project was high with 80% satisfaction on communication from the project. The program to introduce art into the project through local schools and professional artists has been very well received.

EBA issues affected the site but not as significantly as other large site in SA. Safety standards exceeded industry benchmarks.

The relationship approach, integrated working and alternative project management model was a significant success and all team members and stakeholders recognise its benefits.

- The managing contractor effectively embraced a broader agenda than construction and tackled community involvement and ownership of the project, ESD opportunities and FFE procurement.
- Most subcontractors gave feed back that they valued the opportunity to genuinely join the team rather than simply be instructed and in particular the opportunity to contribute meaningful technical and constructability input.
- The consultant team are converts to the approach appreciating that there were real benefits through working collaboratively with the contractor through the design development and documentation stages. The documents were excellent.
- The experience has reinforced our view that project management can be a culture enhanced by a whole-of-team discipline rather than a role provided by an individual organisation.

### **WAS RELATIONSHIP MANAGEMENT HARD?**

It is difficult to keep awareness raised about deliberately approaching all project issues in a fresh way and not reverting to “business as usual” when there were challenges or disagreements. While most projects give some consideration to these issues there was particular emphasis on applying good business practices including:

- A strongly supported vision;
- A clear set of objectives we all aligned on;
- Empowerment of all stakeholders in their respective roles;
- A commitment to make it work.
- A focus on being the team learning and culture to support achievement of the project and commercial objectives.

We don’t normally put that effort into human resource development in a project – rather we focus effort on the physical outcomes and processes.

## **IT WORKS!**

The performance of the LMHS team was outstanding, achieving major savings of project cost despite a difficult tender market and industry resource and industrial dispute difficulties whilst achieving exceptional design and building outcomes.

The collaborative approach to the procurement has changed most people engaged with it. Members of the team advise that they have translated the learning, improvements in management and communication skills to their roles in the project and to aspects of other projects. The procurement method appears to effectively create the environment where better than normal outcomes can be achieved through the power of teamwork.

For the stakeholders:

- all have become better team operators on and off project;
- team members don't ignore problems but fix them;
- concept of alignment is a strong one;
- subcontractors are genuinely in the game
- so is the hospital
- longer term relationships have been built.

The team is currently one of the best running; most harmonious and integrated teams experienced and still has potential for more. In this regard there is a proposal to Government that the team should continue into the next major stage of redevelopment to build on their successes.

## **OUR NEXT CHALLENGES**

Our next challenges is maintaining momentum during the next stage of LMHS (subject to Cabinet approval of contract extension). By the time the next stage is complete the team will have been working continuously for several years.

Another challenge is to use the learning on other major Government projects. Already however the building industry in SA has responded with several significant private sector projects adopting some of the principles and techniques implemented at the Adelaide Convention Centre and LMHS projects.

Getting the balance between investment in the team and its culture and investment in the physical outcomes of the project right is another issue. Some still see the investment in team as wasteful use of scarce capital resources and we need to develop ways of measuring and demonstrating the benefit to the overall project.

## **LIKELY OUTCOMES**

Relationship contracting made a significant contribution to a very successful result in the LMHS Redevelopment Stage A project. The SA government has requested that the model be applied to the \$120M Stage 2 redevelopment at The Queen Elizabeth Hospital. It is anticipated that most projects in the SA Government Capital Investment Program will incorporate aspects of the relationship contracting approach in the future and several will adopt the integrated team project management approach in preference to the traditional project manager model.

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