

Concurrent Session E Tuesday 1 September 2.25pm – 3.15pm





Session 3

One Client, One Project Manager, One Builder, 3 Technically Challenging Projects, 3 Different Procurement Approaches to Provide Key Parameters in Procurement Method Selection Providing the Best Value for Money

Robert Hickson, Eddie Swat

University of New South Wales

Robert Hickson is a Director of Capital Insight, a leading Project Management organisation that provides both business advisory services and project management services for a range of social infrastructure clients, including many Universities and TAFE's.

Robert has undertaken many project roles including as Director responsible for the University of Sydney Campus 2010 Program, the University of Queensland's Innovation Building and for the University of NSW:

- · as Project Director/Project Managers for:
- the award winning Tyree Energy Technologies Building
- the College of Fine Arts project
- the Materials Science and Engineering Building
- the Biological Sciences Project Stage 1
- · leading the planning for:
- the Biological Sciences Project Stage 2
- the Science and Engineering Building.

Robert also undertook the role of Project Director for the Chris O'Brien Life house project, for which Capital Insight won the 2014 Australian Institute of Project Management National Award for construction projects >\$100m.

Eddie is a 'Client Side', Senior Project Manager at the University of New South Wales, working within Planning & Development of the Facilities Management Unit. Eddie represents UNSW and its multifaceted client base, managing Major Capital Works Projects, and has done so since 2012.

Eddie has recently completed UNSW's largest and most expensive project, the New Materials Science and Engineering Building, a \$146.5 Million dollar research and teaching building for the Physical Sciences Precinct at UNSW's Lower Campus in Kensington.

UNSW has over recent years developed (or is developing) 3 high performance research buildings that have been or are being implemented by the same Project Manager (Capital Insight) and the same building contractor (Brookfield Multiplex):

- the \$120m Tyree Energy Technologies Building (TETB);
- the \$146.5m Materials Science and Engineering Building (MSEB); and
- the \$150m Biosciences Research Project (BRP) building.

For these projects, 3 different forms of procurement/contract were utilised that reflected key project drivers including project scope, the program for implementation and accepted risk allocation.

The presentation will discuss the key project drivers, issues associated with the selection of the procurement methods, the benefits UNSW considers were obtained for each project and the issues that arose on the projects that impacted these anticipated benefits.

Project Details

Tyree Energy Technologies Building

A design competition was undertaken for the selection of an architect for the gateway site on which the TETB would be developed. fjmt Architects was selected as the architect, with an assumed form of contract being a Managing Contractor Guaranteed Maximum Price (GMP) form, requiring novation of the design consultants after completion of initial project documentation/brief. The design responsibility transferred to the building contractor on award (with novation of the consultants). Selection of other design consultants was made following a typical consultant tender/selection process.

Project Enabling Works, including demolition of tennis courts and limited services relocations, were undertaken utilising a separate minor works contract enabling a cleared site to be handed to the building contractor upon award. Enabling Works were undertaken in parallel with the main contract tender process.

A two stage building contractor tender process was utilised with tender/contractor documentation structured for a Managing Contractor GMP form of contract. The initial selection phase (EOI) short-listed tenderers to enable a detailed tender submission based on the developed design documentation.

The extent of the design undertaken by the client prior to commencement of the contractor procurement process (EOI) was Scheme Design, with 60% Design Development undertaken prior to the commencement of the tender phase for the short-listed tenderers.

Subsequent to the selection of a preferred tenderer (Brookfield Multiplex), detailed alignment of project scope and pricing enabled a fixed price offer under a DD&C form of contract to be made – and subsequently accepted by UNSW.

The project was successfully implemented and the project was awarded the National Master Builders Association Award for Best Public Building project.

Materials Science and Engineering Building

A design competition was undertaken by UNSW for the MSEB project with Grimshaw Architects (and various design sub-consultants) engaged by UNSW, with responsibility for building and laboratory architecture, all engineering services and structural/civil engineering components of the project design. The engagement documentation was based on a Managing Contractor GMP form of contract. The design team was engaged prior to the engagement of the Project Manager.

Project Enabling Works included demolition of existing buildings, car parking areas and extensive services relocations, which were undertaken utilising a separate minor works contract enabling a cleared site to be handed to the building contractor upon award. Enabling Works were undertaken in parallel with the main contract tender process.

The adopted form of procurement utilised was a lump sum DD&C contract.

The extent of the design undertaken by the client prior to commencement of the contractor procurement process (EOI) was Scheme Design, with 60% Design Development undertaken prior to the commencement of the tender phase for the short-listed tenderers. Novation of the consultants to the building contractor occurred at contract award, with 90% completion of DD documentation.

A two stage building contractor tender process was utilised with tender/contractor documentation structured with an initial EOI selection phase enabling the selection of short-listed tenderers, enabling a detailed tender submission based on the developed design documentation.

Subsequent to the selection of a preferred tenderer (Brookfield Multiplex), detailed alignment of project scope and pricing enabled a fixed price offer under a DD&C form of contract to be made – and subsequently accepted by UNSW.

The contracted project scope included significant provisional sum components for additional works that did not form part of the original project brief.

Biosciences Research Project

UNSW prepared a detailed Project Definition Plan (PDP) defining the project scope and budget, which was utilised as the basis for selection/engagement of the Project Managers.

A MC GMP form of contract was selected with a two stage building contractor selection process – commencing with an EOI, based on the PDP only, and then a subsequent select tender phase utilising the PDP and developed performance documentation only.

A two stage contract engagement process has been adopted, with an initial Target Construction Sum (TCS) offered as part of the tender process, and a GMP to be developed/submitted (within the TCS) on DD documentation. Upon acceptance of the GMP, the construction works commence.

No project design consultants were engaged prior to the engagement of the MC, with the initial task of the engaged contractor (Brookfield Multiplex) being to tender/engage all consultants.

Significant Enabling Works are required and were initially designed/scoped as a variation to an existing and separate MC contract for an adjoining building. These scope/design documents were then provided to the preferred tenderer (prior to award) and a separate contract awarded to Brookfield Multiplex to undertake the Enabling Works.

Key Issues to be discussed

- The initial project scope definition and extent of documentation included in the contract
- The alternative forms of contract and key differences
- The project drivers that resulted in different forms of contract being adopted
- Issues with each form of contract that required management
- Cost and program benefits
- How quality was/is being maintained