

# Asset Management Services - Process for the Management of Major Building Works

## Version 2 - Revised January 2009

### Introduction

This process document is to be read in conjunction with the Capital Management Plan Submission and Approval process, which can be found on the web at [www.utas.edu.au/ams/CMP\\_submission\\_approval\\_process.htm](http://www.utas.edu.au/ams/CMP_submission_approval_process.htm). It has been developed to ensure major capital works are managed in a uniform way. The AMS Minor Works process (AMS3.3) also follows the stages of this process. It should be noted that while the project phases / stages have been listed sequentially, many of the activities within each phase may be undertaken concurrently. (Note- Documents highlighted in red require development.)

A number of general AMS processes have been referenced. These processes are (or will be) documented separately:

- Contract Preparation
- Use of Electronic Australian Standard Contracts.
- Management of Building and Plumbing Permits.
- Management of Bank Guarantees
- Contract Risk Insurance

A check list column has been added to this version of the document and must be completed by projects managers for all projects. This is to ensure that a later audit trail is available if required. It will therefore be necessary to print a copy of the relevant project stages and append to file in both hard copy and, at the end of the project in TRIM. The project stages / phases are:

Project Identification and Assessment

Project Start-up

Feasibility Stage / Project Scoping and Programming

Feasibility Stage / Consultant selection

Feasibility Stage / Feasibility Study

Procurement Stage / Schematic Design (Sketch Planning)

Procurement Stage / Detail Design (and Tender Documentation)

Procurement Stage / Tender

Procurement Stage / Construction

Procurement Stage / Hand over & Practical Completion

Post Construction Stage / Defects Liability

I	Project Identification and Assessment	<ul style="list-style-type: none"> <li>Capital Projects maybe initiated by a Faculty, School or Division, or Asset Management Services to meet the strategic objectives of the University.</li> <li>Projects initiated as a result of Master Plan or the Strategic Plan may be assessed and managed differently.</li> </ul>				
	Task / Event	Major Player	Minimal Activities/Methodology/methodology	Pro forma / Comment	Checklist Completed or NA	
A	Receipt of Capital Funding Business Case Request within AMS. Review and prepare report for consideration by CMPRC.	MCP&M DIR AMS	<p>MCP&amp;M acknowledges receipt and undertakes initial investigations in line with Capital Management Plan Process includes but may not be limited to the following:</p> <ul style="list-style-type: none"> <li>Review of project against UTas Strategic Infrastructure Plan &amp; existing priorities; .. Masterplan, EDGE agenda, CMPRC requirements.</li> <li>Review requests for additional space against existing utilisation statistics.</li> <li>Identify procurement issues for example, time line too short for a capital solution, funding likely to be delayed, non capital solution an option.</li> <li>Identify any special user requirements, both Spatial and Program (Time)</li> </ul> <p>Investigations could also include</p> <ul style="list-style-type: none"> <li>Preliminary identification of associated non space issues (liaise with ITR, DAWP, OH&amp;S, IS Unit, FM Unit, as appropriate.).</li> <li>Preliminary consideration of any Statutory Requirements. Review requirements of BCA, planning schemes etc if appropriate.</li> <li>Identification of any Project dependencies. It may be necessary to complete another project before tackling the new one or to stage the works to meet specific needs.</li> <li>Project will be prioritised using the CMP Strategic Rating Scale, for consideration / confirmation by the CMPRC</li> </ul> <p>Order of Cost or Indicative Cost Estimate may be provided based on m<sup>2</sup> rate plus an additional %. Usually prepared within AMS but external (QS) advice may be sought if required</p>	See flow chart on AMS web site. CMP Strategic Rating Scale for projects.		
	Output	Provide a strategic rating for the project using current CMPRC rating scale.			Need to obtain sufficient information for the criteria in the rating scale.	
	Obtain	CMPRC will be asked to review request against current Strategic Infrastructure priorities and make a recommendation to the P&RC. Future progress with the request will depend on the Strategic Priority awarded.				

**PROJECT START-UP STAGE (Required prior to a Feasibility Study or, if no study, prior to commencement of design stage)**

2	<b>Project Management Methodology agreed, Project Time-table established, Identification of high level University risks.</b>	<ul style="list-style-type: none"> <li>Initiated when the CMPRC requests a Feasibility Study be undertaken OR if a project has a sufficiently high priority that the University (P&amp;RC, BEC, Finance Committee and Council) have agreed to progress it and a Feasibility Study has not previously been obtained.</li> <li>Requirement of this stage is to establish the basic programme plan,</li> <li>Identify preferred procurement methodology , and</li> <li>Decide how to select project consultants.</li> </ul>			
	<b>Task / Event</b>	<b>Major Player</b>	<b>Minimal Activities/methodology</b>	<b>Pro forma / Comment</b>	<b>Checklist Completed or NA</b>
A	Project manager (PM) identified.	MCP&M			
B	Membership of project Board or Steering Committee agreed.	MCP&M	Minimum membership to be a CMPRC member as Chair, Dean of Faculty or Head of Division and Director AMS.	Terms of Reference provided and agreed (exist)	
C	Project Management Methodology Identified, project time-line developed.	MCP&M, PM, Project contact if required, Other AMS staff if appropriate. Project Board if necessary	<ul style="list-style-type: none"> <li>Identify and document preferred procurement methodology taking account of the complexity of the project, required delivery date, anticipated budget (if known), importance or sensitivity of project to University,.</li> <li>Identification of any obvious risks and documentation in Risk Register.</li> <li>Determine how to select consultant team.</li> <li>Determine any special conditions to be met by the consultant team and that need to be advised prior to selection.</li> <li>If necessary identify how the POE will be undertaken to ensure that this is considered in the project design stages, eg will the consultants be involved.</li> </ul>	Template or checklist (Required)	
D	Commence Risk Register	PM	<ul style="list-style-type: none"> <li>As well as any obvious University Risks include any that can be foreseen but will need to be managed by the Consultant team</li> </ul>	Template (Required)	
E	Report to Project Board.		<ul style="list-style-type: none"> <li>Obtain the Project Board's agreement to the proposed methodology including acknowledgement and acceptance of any identified risks.</li> </ul>		
F	Agree Project Board's operating method	MCP&M & DIR AMS	<ul style="list-style-type: none"> <li>Details reports to be provided to Board (Traffic light, Incident Reports, Lessons Learned Reports, End of Stage Traffic Light Reports plus ad hoc reports if required).</li> <li>Agree meeting schedule. Could be a physical meeting every three months or a virtual meeting by circular if project is on track.</li> </ul>	Samples of reports required	
G	Confirm internal project monitoring process with Board.		<ul style="list-style-type: none"> <li>Monitoring undertaken by MCP&amp;M and DIR AMS. MCP&amp;M to receive regular monthly reports and discuss with DIR AMS at monthly catch-up meetings.</li> </ul>		

## FEASIBILITY STAGE

3	<b>Project Scoping and Programming</b>	<ul style="list-style-type: none"> <li>Initiated when the CMPRC requests a Feasibility Study be undertaken OR if a project has a sufficiently high priority that the University (P&amp;RC, BEC, Finance Committee and Council) have agreed to progress it and a Feasibility Study has not previously been obtained. Requirement of this stage could be to obtain a Feasibility Study Report for the CMPRC OR to commence the actual project.</li> <li>A feasibility study will help determine the size and complexity of the project. This determines the most appropriate consultants and method of delivery to achieve the end objective.</li> <li>The user requirements are also established and confirmed</li> </ul>			
	<b>Task / Event</b>	<b>Major Player</b>	<b>Minimal Activities/methodology</b>	<b>Pro forma / Comment</b>	<b>Checklist Completed or NA</b>
A	Briefing for Internal staff (AMS, ITR, OH&S etc) and request for information	PM	Provide a formal briefing session to explain background of project and progress to date. . Request identification of and reporting about any possible related issues. If not provided at briefing session provide form for written response.	<b>Form 1</b> Project Information Request Form	
B	Request for FMIS account	MCP&M		Email Finance Support Desk@utas.edu.au	
C	Open relevant project file(s)	PM & AO	The FMIS account number to be used as the major TRIM identifier.	Use agreed Project File Structure Put copy as attachment.	
D	Project User Group established (PUG)	PM	Identify members and hold first meeting.	<b>Form 2</b> Terms of Reference PUG & PWP <b>Form 3</b> Minute Format for PUG Meetings	
E	Project Working Groups established (PWP)	PM	Usually at first PUG meeting		
F	Technical Working Group established (TWG)	PM	Identify relevant AMS, OH&S, DAWP staff/representatives.	<b>Form 4</b> Terms of Reference	
G	QS be appointed.	PM & MCP&M	Select from approved list taking account of previous experience and current UTAS work load of each QS	<b>Form 5</b> Request for QS fee Proposal. <b>Form 6</b> Head Contract mini Contract	
H	Determine User Project Requirements.	PM & MCP&M	Actual space requirements to be based on student & staff number projections and relevant TEFMA space standards. Space for research or general activities to be based on actual need, BCA requirements, Australian Standards, TEFMA benchmarks and requirements of Design Requirements. Consult OGTR or AQIS requirements if required.	<b>Form 10</b> Details of New Space User Requirements. <b>Form 11</b> Refurbishment User Requirements.	
I	Determine other project requirements, usually technical.	PM	Based on information provided by AMS staff (IS Unit & FM Unit), OH&S, DAWP. IS Unit & FM Unit expectations of consultants and other project specific requirements, for example, the need for external plant or equipment to comply with Local Authority regulations. Liaise with CAD section to determine if existing building plans are adequate or if the project needs to include a redraw of all or part of an existing building.		
J	User requirements confirmed	PM	Spatial, Program (Time), special equipment etc		
K	Expectations of consultant team determined	PM	PM to work with PUG/TWG to document project specific expectations of consultant team		

L	Identify appropriate insurance requirements for consultants.	PM MCP&M F&BS	If necessary PM to consult with Insurance staff in F&BS. <ul style="list-style-type: none"> <li>Specify appropriate level of Professional Indemnity required of the consultants</li> <li>Consider how to manage the Contract Risk insurance, especially for refurbishment projects costing more than \$1m. Preference is for the University to provide the Contract Risk insurance.</li> </ul>		
M	Prepare Commissioning Brief	PM	Include references to AMS web policy/procedures, Design Requirements, expectations of consultants, CAD Standards, MRBA, Policy, etc. Clearly identify selection criteria and/or basis of selection. Include information relating to fees.	<b>Form 15</b> Consultant Selection Brief for Major Refurbishment. <b>Form 16</b> Consultant Selection Brief for Minor Works. <b>Form 17</b> Consultant Selection Brief for New Capital Works (required) <b>Form 18</b> Consultant Selection Recommended Format for Fee Proposal	
N	Identify appropriate contract to be used.	PM	Refer to process <a href="#">Use of Electronic Australian Standard Contracts</a> .	Use electronic templates for AS contracts. Obtain UTAS Legal Office Contract from G&L web site.	
O	Review cost estimate	QS	QS to review project requirements identified to date. and develop the <a href="#">Brief Stage Cost</a> .		
	Output		End Stage report. Confirmed project requirements (both user and technical; not room data level at this stage, but to include types of user equipment required) Commissioning Brief QS Estimate of Brief Stage Cost based on data obtained for Commissioning Brief.  Seek approval to proceed to select consultant from the Project Board.	<b>POSSIBLE HOLD POINT</b>	
	Obtain		If Brief Stage cost has increased over Indicative Cost, obtain approval for a budget increase or agreement of Project Board to a scope decrease.		

4	<b>Consultant Selection</b>		<ul style="list-style-type: none"> <li>The process used to select and appoint the principal consultant for the project will be in accordance with established UTAs tendering processes.</li> <li>Client interaction may be sought as appropriate depending on the nature of the proposed works.</li> </ul>		
	<b>Task / Event</b>	<b>Major Player</b>	<b>Minimal Activities/Methodology</b>	<b>Pro forma / Comment</b>	<b>Checklist Completed or NA</b>
A	Assessment process	Panel PM	Assessment panel to be established in accordance with existing UTAs processes and information provided in the request for fee or Commissioning Brief.	<b>Form 20</b> Conflict of Interest Statement <b>Form 21</b> Tender Opening Schedule <b>Form 22</b> Consultant Selection EOI Evaluation Summary	

B	Appointment procedure	PM AO	If necessary and as allowed in UTas selection processes, negotiate on cost, time, scope, outputs, sub-consultant selection and expectations etc prior to preparing contract for signature. Refer to <a href="#">Contract Preparation</a> process	As per contract procedure Incorporate documents by reference as far as possible. Use electronic version of AS contracts. <b>Form 23</b> Successful Consultant Letter <b>Form 24</b> Request for EDFA to Sign Contract <b>Form 37</b> Unsuccessful Advice Letter	
C	Receipt of signed contracts	AO	Trim and file as required. Start work		
	Output	Signed Contract/s			

5	<b>Feasibility Study</b>		<ul style="list-style-type: none"> <li>The goal of the feasibility study is to develop options and associated cost estimates to achieve the project objective.</li> <li>Consultants are expected to test and put forward a range of options for University consideration.</li> <li>The Built Environment Committee is to be involved in the project at this stage.</li> <li>The outcome of this stage is the recommendation of the preferred option for detailed design.</li> </ul>		
	<b>Task / Event</b>	<b>Major Player</b>	<b>Minimal Activities/Methodology</b>	<b>Pro forma / Comment</b>	<b>Checklist Completed or NA</b>
A	Obtain project timetable from consultant	PM & PC	The timetable needs to take account of the University's internal approvals timeframe and preferred timetable and expectations with respect to the anticipated date of Practical Completion		
B	Identify any changes to work practices, organisation etc to be implemented by the user as part of project	MCP&M PM HOS Dean	For example a desire to move to more open plan or shared accommodation. A desire to alter work flows or the way an activity is undertaken.	The section concerned must actively manage this and all staff must be involved. While it is not the responsibility of the PM or PC it needs to be acknowledged that failure to successfully manage will result in major problems for the project later.	
C	Confirm membership of PUG/TWG	PM			
D	PUG hold Inaugural meetings with PC	PM	Confirm Terms of Reference for each group and scope of study. Confirm Program Confirm communication expectations including between technical staff and the sub-consultants. Establish risk register and then ongoing updating.	<b>Form 2</b> Terms of Reference PUG & PWP <b>Form 3</b> PUG Minute Format <b>Example of Risk Register (required).</b>	
E	Review Risk Register and develop process for its review & update.	PM & Consultants	Status of Risk Register to form part of on-going report to Steering Committee	<b>Use template</b>	
F	Future PUG Meetings	PM	Consultant to present and develop ideas/concepts/options Include presentation/discussion with BEC during the process for their input and comments.	<b>Form 10</b> Details of New Space User Requirements. <b>Form 11</b> Refurbishment User requirements.	

G	Establish reporting timetable for Steering group	PM, MAN CP&M	Advise consultants and PUG of proposed timetable. Provide consultant's with details of expectations from them eg Traffic Light Reports, Incident Reports, End Stage Reports. Up-to-date Risk Register.		
H	Referral to BEC	MCP&M DIR AMS	BEC to be asked for strategic input with respect to options being considered in the Feasibility Study. May require reference to 1 or 2 meetings as instructed by BEC. If necessary BEC to be involved in site selection. <b>Process under development</b>		
I	PWP, TWP meetings as required	PM PC Sub-Cons	To provide technical/detailed data for preparation of study. Advise all consultants of need for simple schematic drawings and descriptive documents to be provided.	<b>Form 25</b> FM project Requirements <b>Form 26</b> IS project requirements	
J	Site Services considered	Sub-cons	Including ESD Goals Consultation with FM Unit, IS Unit, ITR, DAWP, OH&S required		
K	Building Services considered	Sub-cons	Including ESD Goals Consultation with FM Unit, IS Unit, ITR, Student Services Disability staff,, OH&S as required Consultant to confirm building dimensions match electronic data provided by UTas (CAD Files)		
L	Preparation of preliminary services design brief.	Sub-cons	TWP to review and comment.		
M	Options	PC	Identify possible options. Identify preferred option(s) with justification		
N	Establish <b>Outline Proposal Costs</b> for option(s)	QS	Only for preferred option(s)		
O	Preferred option identified and endorsed by PUG.	PM PC			
P	Report from Feasibility Study provided to Steering Group	PM MAN CP&M	Steering Group consider report and costs and provide a recommendation to the CMPRC. The Feasibility Study Report will be the End Stage report. At this stage the Risk Register should also be reviewed by the Steering Group.		
Q	Recommendation endorsed	CMPRC	Recommendation forwarded to P&RC for endorsement and forwarding to Finance Committee and Council.	POSSIBLE HOLD POINT: a) Option not accepted, or, b) <b>Outline Proposal Cost</b> too high.	
	Output	Feasibility Study with recommended option and Outline Proposal Cost. Report into service investigations to be included in Feasibility Report. Risk Register commenced Finalised scope of works signed off by PUG			
	Obtain	Approval to proceed from P&RC and Finance Committee/Council			

## PROCUREMENT STAGE

6	<b>Schematic Design (Sketch Planning)</b>	<ul style="list-style-type: none"> <li>The schematic design stage is where the endorsed concept is developed into a preliminary design.</li> <li>During this stage the appropriate groups assist with detailing specific requirements for the schematic design option.</li> <li>The consultant group develops this information into sketch plans suitable for review, comment and approval from all users, including University technical staff.</li> <li>This stage also enables a more accurate cost estimate to be prepared.</li> </ul>			
	<b>Task / Event</b>	<b>Major Player</b>	<b>Minimal Activities/Methodology</b>	<b>Pro forma /Comment</b>	<b>Checklist Completed or NA</b>
A	Reconvene PUG/PWP's and TWP	PM	<ul style="list-style-type: none"> <li>Confirm Terms of Reference.</li> <li>Confirm option</li> <li>Confirm Program/timeframe</li> <li>Confirm brief for both space and services.</li> <li>Prepare detailed Room Data Sheets, data to include information regarding services such as acoustics, noise generation, operating details/requirements of equipment, OH&amp;S and ergonomic specifics</li> <li>Prepare Services and or equipment Data Sheets if necessary</li> </ul> <p>If any of the above have altered substantially or to the point where they could affect the project's viability, prepare a report for consideration by the Steering group.</p>	<b>Form 2</b> Terms of Reference PUG & PWP <b>Form 3</b> PUG Minute Format <b>Form 27</b> Space data sheet (being revised)	
B	Risk Register		<p>Continue to maintain the Risk Register.</p> <p>An incident report may be required from this stage onwards.</p>	Template incident report.	
C	Review status of any work or organisational changes being undertaken by the users in association with the project (see 4B above)	School, Section, Division, Faculty	All staff involved in the proposed change need to have input and be aware/support.	Success or failure of work practice change proposals will affect the schematic plan proposed.	
D	Confirm spatial relationships within building	PM PC PUG	<p>Identify activities that need to be adjacent or separated.</p> <p>Establish mix of open plan/ closed offices/ shared research laboratories etc.</p>		
E	Confirm with consultant team the University expectations for written reports, schematic drawings, reference to and compliance with the Design Requirements.	PM Principal Consultant	Best done via a preliminary meeting where the Feasibility Report (or Brief if no Feasibility Report) is reviewed.	Template for return briefs	
F	Prepare floor plans and elevations (and others as appropriate) for comment	PC Sub-cons	QS to build up <a href="#">Sketch Design Cost Plan</a> concurrently		
G	Initial material (building fabric) investigations	PC Sub-cons			

H	Set environmental, ESD and other infrastructure requirements.	Sub-cons TWP	For example, temperature requirements and airflows, after hours access, BCA requirement.		
I	Liaison with planning authorities	PC	Preparation of Planning/Development Application, if required		
J	Produce reports	PC Sub-cons	For example, Access, Building Surveyor, Acoustics, Fire Services	<b>Form 28</b> Project sign-off at various stages (to be developed)	
K	Compare Sketch Design Cost plan with previous cost plan .	QS	Either Order of Cost or Outline Proposal Cost.		
L	Prepare End Stage Report for Steering Group	Consultants and PM	If budget exceeded review scope/brief and establish reason. Then either <ul style="list-style-type: none"> <li>Try to reduce scope to reduce cost to budget.; or</li> <li>Develop a business case to support a budget increase.</li> </ul>		
M	Steering Group to review End Stage Report and Risk Register		If the Sketch Design Cost is in Line with the agreed budget the Steering group are likely to approve progression to next Stage. If not Steering Group will need to decide what to do next.	<b>POSSIBLE HOLD POINT</b>	
	Output		Confirmation of spatial relationships, broad concepts for architectural and services, Preliminary Services design Brief Preliminary ESD report Achieve sign off by PUG /PWP /TWP QS cost estimate either Order of Cost or Outline Proposal Cost.	After this point the PUG will not normally be able to request changes to the project, ie increase in sizes or changes to services components. In the event of a really unexpected requirement they may be required to meet the additional cost.	
	Obtain		<ul style="list-style-type: none"> <li>Approval to proceed to next stage and/or</li> <li>Increased budget approval if required.</li> </ul>	PS monitor "scope-creep"	

7	<b>Detail Design (and Tender Documentation)</b>	<ul style="list-style-type: none"> <li>Development of sketch design into working drawings and specifications suitable for construction purposes.</li> <li>Drawings and specifications, compiled from all disciplines, constitute the tender documentation.</li> <li>This documentation is reviewed and approved by the University prior to the next stage.</li> </ul>			
	<b>Task / Event</b>	<b>Major Player</b>	<b>Minimal Activities/Methodology</b>	<b>Pro forma / Comment</b>	<b>Checklist Completed or NA</b>
A	Identify documentation required for tendering and preferred method of tendering.	PM	Confirm form of construction contract required UTAS to provide standard RFT documentation. Confirm insurance requirements (contractor or principal controlled) <a href="#">Insurance process</a>	Use electronic AS documents <b>Project 30</b> RFT Template doc	
B	Floor plans, elevations and furniture layouts (and others as appropriate) for comment	PC Sub-cons	PUG, PWP & TWP to review layout and compliance with data sheets. May need to include review by disability access staff, OH&S staff etc		
C	Sections, joinery, demolition, finishes	PC			

D	Revised engineering services design brief (including provision of specialists) prepared for review and comment.	Sub-Cons	Documentation for review by UTAS to comprise written design report/return services brief and schematics. Stress to consultants that answers such as "its shown ion the drawing" not acceptable. Document to reflect environmental, ESD and other services requirements identified in Section 5 and all IS Unit & FM Unit requirements. To show how design will meet design targets. Meetings with TWP on an as required basis to discuss and confirm requirements Where specialised equipment is to be accommodated PUG & PWP to review services proposed. TWP &/or Man IS Unit, Man FM Unit review on behalf of AMS. Discuss with Sub-cons and agree any changes. AV, Data, communications, etc QS to build up Tender Document Cost concurrently.		
E	Provision of asset information from Assets and Property Officer		If demolition is involved, advise Assets Officer by providing list of items. to be removed When demolition completed Contractor to confirm removal of assets on the appropriate form.	Forms to use	
F	Returned Services Brief sign-off	Sub-cons Man IS Unit Man FM Unit	Document should reflect all discussions and decisions previously agreed. It should be capable of being used as the basis for a POE of Service operation.		
G	Floor Plans to Space Planner for allocation of room numbers	PC PM			
H	Documentation review, including QS reviews at 50%	PC QS	Includes drawing and specification schedule and drawing status, and commentary Update Return Services Brief	POSSIBLE HOLD POINT	
I	Risk Register	PC	To be finalised during this stage and used to help decide on insurance option to be adopted.		
J	Specification review	PM	Practical completion requirements Commissioning plan Training plan Handover Asset Data (disposal/addition)		
K	Documentation review at 90% review by select PUG, PWP, TWP members (and others as appropriate)		Drawing Schedule Update Return Services Brief Tender closing date time and location Project specific conditions, e.g. Liquidated Damages, insurance's etc.	<b>Form 28</b> Project sign-off at various stages (to be developed)  POSSIBLE HOLD POINT	
L	Certification that plans and specifications comply with all required standards.	PC	BCA requirements met OTGR (if required) AQIS (if required) UTas Design Requirements Any other relevant standard eg noise levels for community, noxious smells etc QS to prepare <u>Pre-tender estimate. (or Tender Document Cost Plan)</u>	<b>Form 35</b> Confirmation all statutory and Design Requirements met.	

M	Provide End Stage Report and Risk Register to Steering Group	PM	If Tender Document Cost Plan is within budget. Seek agreement to call tenders. If Tender Document Cost too high .provide report to Steering Group. The reports should identify possible savings with consequences of accepting or seek approval to vary budget. Steering Group either agree reductions and advise CMPRC or, after review, agree cost increase and refer to delegate.	<b>Form 36</b> Agreement to Call Tenders POSSIBLE HOLD POINT,	
	Output	Tender documentation Return Services Brief Certification from PC UTas checks at 50% and 90% QS checks at 50% and 90%			
	Obtain	Building/plumbing permits Obtain QS Pre tender estimate.			

8	Tender	• Competitive prices are sought through standard tendering processes.			
	Task / Event	Major Player	Minimal Activities/Methodology	Pro forma / Comment	Checklist Completed or NA
A	Requests for Information and issue of addenda's	PC	Through consultant, UTas may nominate contact person for projects undertaken within AMS		
B	Tender opening Board	PM	In accordance with Finance policy (existing on web). But relevant consultants and the QS may be included if appropriate.	<b>Form 20</b> Conflict of Interest Statement <b>Form 21</b> Tender Opening Schedule	
C	Tender within budget	PM	With PC confirm price with lowest tenderer – proceed to develop contracts. PM to advise PS		
D	Tender exceeds available funds	Tender Board PC PM	Negotiate with lowest tenderer to reduce cost by reducing scope. If not possible options are to Seek additional funds Defer Cancel Tender Board to recommend an option Steering group	POSSIBLE HOLD POINT	
E	Advise Steering Group of Tender outcome.		No action required if tender is on budget. If tender exceeds budget Steering group will need to review outcome of tender negotiations and endorse recommended action to delegate.		
F	Ensure sufficient funds in FMIS project	PM	Obtain IDRs or arrange for transfers of additional funds from other sources. If funding to be provided later obtain written indication of payment timetable.		
G	Prepare contract/purchase requisition	PM	In accordance with <a href="#">Contract Preparation</a> process	<b>Form 37</b> Unsuccessful Advice Letter <b>Form 38</b> Advice to Successful Contractor	
	Output	Signed Contract/s			
	Obtain	Approval to proceed from PS (if tender price exceeds funds available)			



H	Enforce Hold points	PC	Sight samples etc		
I	Variations	PC PM	All variations to be approved by UTAs first UTAs to be advised of all RFI's, variations, site instructions etc. Approval of variations to be assessed against risk register. If variation will require a budget increase, that is beyond existing AMS delegations, the matter will need to be referred to the Steering Group for them to review and recommend to delegate..		
J	Funding of variations	PM	If variations are agreed it will be necessary to review PO's and issue new ones to ensure that additional funds are available to pay invoices. DO NOT LEAVE THE COLLECTION OF ADDITIONAL FUNDS OR THE PREPARATION OF ADDITIONAL PO's TO THE END OF CONSTRUCTION. As PO's are expended arrange for them to be closed.		
	Output	Activity on project site			
	Obtain	Ongoing communications from consultant → contractor → etc			

10	<b>Hand over / Practical completion</b>	<ul style="list-style-type: none"> <li>Prior to finalisation of the construction University staff will undertake a series of inspections, and where necessary training in newly installed equipment before the project will be accepted from the contractor.</li> <li>The contractor is expected to produce a series of documents in accordance with FMU &amp; IS requirements detailing the finished works, equipment operation and maintenance, necessary before the facility can be occupied.</li> </ul>			
	<b>Description / Event</b>	<b>Major Player</b>	<b>Minimal Activities/Methodology</b>	<b>Pro forma / Comment</b>	<b>Checklist Completed or NA</b>
A	Pre Practical Completion site meeting (Possibly one month prior to anticipated PC date.	Project manager, Contract Superintendent, Main contractor & all sub contractors,	Purpose is to remind all contractors of the requirements for PC. Specifically which documents and information MUST be provided prior to the granting of PC and which material can come later but specify a time and penalty for non compliance.	Asset Data Collection Forms for completion Written documentation explaining what is required and when.	
B	Preparation of Preliminary Defects List	PC Sub-cons PM	Compile at pre-hand over inspection, include users and other AMS/ITR staff as appropriate		
C	Preliminary Defects addressed.	Contractor			
D	Commissioning of plant and equipment	PC	IS/FRU Staff to be advised so that they can be present. Training in use/maintenance of equipment to relevant AMS and maintenance staff and other users if required		

E	Practical completion meeting	PM	<p>Attendance by PM, IS Unit staff, FM Unit staff, etc. The following are required at this time, even if in draft.</p> <ul style="list-style-type: none"> <li>• Operation manuals</li> <li>• Training Guides</li> <li>• User instructions</li> <li>• Asset Register Form/s</li> </ul> <p>The following are required as soon as possible after Practical Completion.</p> <ul style="list-style-type: none"> <li>• As installed Drawings in CAD and</li> <li>• Information on space use, may need to be prepared by PM</li> </ul>	As detailed in IS and FMU project hand-over protocols. Could be <b>Form 41</b> IS Project Handover Requirements <b>Form 42</b> FM Project Handover Requirements	
F	Preparation of Emergency Evacuation Plan	Man facilities Services	Required prior to final inspection by TasFire		
G	Certificate of occupancy issued	Local authority			
H	Defects list generated	PC Sub-cons			
I	Practical Completion Certificate	PC			
J	Hand over of keys	Contract or	To AMS staff		
K	Report to Steering Committee	PM	Final End Stage Report Date of PC, date of occupancy, comments on any DLP issues still to be resolved.		
L	Notifications to client Required at least a month prior to anticipated PC date.	AO	AMS to provide a checklist for client to update ITR etc. <ul style="list-style-type: none"> <li>• Telephone database</li> <li>• Physical addresses</li> <li>• Australia Post</li> <li>• Web-pages, etc</li> <li>• Establish process for reporting of maintenance and defect issues during DLP.</li> </ul>	<b>Form 43</b> Client Notification of Services to be Considered (required)	
M	Release of first Bank Guarantee	PM AO	<a href="#">Management of Bank Guarantees</a> process	<b>Form 44</b> Release of Bank Guarantee – Contractor <b>Form 45</b> Release of Bank Guarantee – Bank	
N	Review funding position / FMIS project	PM	If necessary remember to collect additional funding promised from other Budget Centres. Review all POs and close any completed ones.		

O	Provide report on project management and budget issues to Steering Group within 3 months of PC	QS PC PM	<ul style="list-style-type: none"> <li>The Steering Group to review and report project outcome to CMPRCQS provides a final report on project cost. And an indication of \$/m2 with an assessment against the Rawlinson's expectations.</li> <li>QS identifies high, medium &amp; low cost areas for inclusion in Archibus.</li> <li>PM to review Risk Register and Issues Report and prepare a Lessons Learnt report.</li> <li>Identification of any changes in space use / requirements that may have arisen during the project.</li> <li>Comments on Utilisation stats resulting from work.</li> <li>Comments on adequacy of procurement methodology adopted.</li> </ul>		
	Output	Completed project which meets user needs			
	Obtain	Certificate of occupancy Practical Completion Certificate Manuals Training Financial Summary			

## POST CONSTRUCTION STAGE

II	<b>Defects Liability Period</b>		<ul style="list-style-type: none"> <li>The period in which building defects can be attended to by the contractor for the works.</li> <li>It is normal for this period to be up to 52weeks long to ensure the facilities proper operation through four seasons.</li> <li>Normal wear and tear, vandalism or malicious damage is attended to by University maintenance staff.</li> </ul>		
	<b>Task / Event</b>	<b>Major Player</b>	<b>Minimal Activities/Methodology</b>	<b>Pro forma / Comment</b>	<b>Checklist Completed or NA</b>
A	Rectification of Initial Defects	Contractor	Any/all defects identified at practical completion to be attended to within 10 working days		
B	Defect or normal wear and tear in DLP		Response times as per Utas Maintenance Immediate – respond within two hours, complete within 4hours Urgent – respond in 3 days complete within 4days Routine – respond in 2 weeks, complete within 3weeks		
C	Engineering Services Review. Consultants to review physical/functional aspects of project.	PC Sub-cons	Undertake 6months after practical completion and provide report to Man IS Unit. This could fit in with BEC request below but will all be reviewed in 2009.	CP&M Unit to determine what we want consultant to review	
D	POE	All	<ul style="list-style-type: none"> <li>Built Environment Committee request initial evaluation at six months after PC (Content to be established)</li> <li>Final review due after 12 months.</li> </ul>	To be established in 2009	
E	One month prior to end of DLP inspect work	PC	Get program from contractor on issues to be attended		

F	Final inspection	PC PM	FM Unit, IS Unit, PM, Client, Consultant, contractor Ensure final seasonal adjustments completed to ensure proper operation of all systems.		
G	Receive final certificate	PM	Advice to release bank guarantee		
H	Release of second bank guarantee	PM AO	<a href="#">Management of Bank Guarantees</a> process	<b>Form 44</b> Return of Bank Guarantee Letter to Contractor <b>Form 45</b> Return of Bank Guarantee Letter to Bank	
I	Finalise project files	PM AO	<a href="#">In accordance with existing archive process/policy</a>		
J	Close project finance accounts	PM			
	Output	Project finalisation			
	Obtain	Final Certificate Post Occupancy Evaluation			

## Glossary- Definitions

Abbreviation	Meaning
AMS	Asset Management Services, University of Tasmania
AO	Administration Officer in AMS
AS	Australian Standard
AV	Audio Visual
BCA	Building Code of Australia
BEC	Built Environment Committee
CAD	Computer Aided Design
CMPRC	Capital Management Planning Review Committee
DAWP	Disability Access Working Party
DLP	Defects Liability Period
Dir. AMS	Director, Asset Management Services
EDFA	Executive Director Finance and Administration
ESD	Environmentally Sustainable Design
Fin Comm	Finance Committee, University of Tasmania
FMIS	Financial Management Information System
FMUnit	Facilities Management Unit, Asset Management Services
ISUnit	Infrastructure Services Unit, Asset Management Services
ITR	Information Technology Resources, University of Tasmania
LO	Legal Office
Man CP&M	Manager, Capital Planning & Management Unit, Asset Management Services
MRBA	Mandatory Requirements for Building Access
OH&S	Occupational Health & Safety
PC	Principal Consultant
PM	Project Manager
POE	Post Occupancy Evaluation
PRC	Planning and Resources Committee
PUG	Project User Group
PWP	Project Working Party
QS	Quantity Surveyor
RFT	Request for Tender
Sub-cons	Sub-consultants to the project
TEFMA	Tertiary Education Facilitations Management Association
TWP	Technical Working Party
UTas	University of Tasmania

## Index of Templates / Form letters To be reviewed

<b>CP&amp;M Documents</b>	
Form 1	Project Information request Form
Form 2	Terms of Reference PUG & PWP
Form 3	Minute Format PUG Meetings
Form 4	Terms of Reference TWP (To be developed)
Form 5	Request for QS Fee proposal
Form 6	Head Contract – Mini Contract
Form 10	Details of New Space User requirements
Form 11	Refurbishment User Requirements
Form 15	Consultant Selection Brief Major Refurbishment
Form 16	Consultant Selection Minor Works
Form 17	Consultant Selection New Capital Works (To be developed)
Form 18	Consultant Recommended Format for Fee Proposal
Form 20	Conflict of Interest Statement
Form 21	Tender Opening Schedule
Form 22	Consultant Selection EOI Evaluation Summary
Form 23	Successful Consultant letter
Form 24	Request for EDFFA to Sign Contract
Form 25	FM Project requirements
Form 26	IS Project Requirements (existing IS document?)
Form 27	Space Data Sheets (being developed)
Form 28	Project Sign-off at Various Stages (to be developed)
Form 30	RFT (being developed)
Form 35	Confirmation All Statutory and Design Requirement Requirements Met (to be developed)
Form 36	Agreement to Call Tenders
Form 37	Unsuccessful Advice letter
Form 38	Advice to Successful Contractor
Form 39	AMS Start Work Notice
Form 40	Communication with Consultant
Form 41	IS Project handover (to be developed)
Form 42	FM Project Handover (In development)
Form 43	Client Notification of Services to be Considered (To be Developed)
Form 44	Release of Bank Guarantee – Contractor
Form 46	Release of Bank Guarantee – Bank
Form 46	Transmittal Notice

<b>AMS Documents</b>	
	AMS Site Induction Handbook
	Asset Categories Requiring Asset Forms
	Asset Detail – New, Relocated or Removed Form
	Asbestos Treatment / Removal Form

## ***STANDARD CAPITAL WORKS PROJECT DEFINITIONS***

- 1     **Order of Cost:**  
      This is an indication of the likely cost of a project given sketchy information.
- 2     **Indicative Cost Estimate:**  
      Initial estimate of cost for a project at the pre-feasibility stage. Generally this is at the Project Identification and Assessment stage where there is only an idea of what is required.  
      Used to determine if funds are likely to be available and whether to proceed to the next stage.  
      Order of accuracy  $\pm 30\%$ .  
      Also called “ball-park” estimate.
- 3     **Brief Stage Cost:**  
      This is an estimate prepared using the initial brief that has been used for the selection of the Principal Consultant. It is derived from the anticipated functional areas, using known building costs from similar projects with external costs indicated separately.
- 4     **Budget Estimate or Outline Proposal Cost:**  
      This is the estimate of cost for the project at the end of the feasibility study.  
      This has identified in more detail the scope of the works and generally produced some option plans that can be measured to provide a more accurate cost.  
      Used to include in ‘high-level’ budgets to determine if funds are going to be available and whether the project should proceed or how it can be funded.  
      Order of accuracy  $\pm 20\%$ .
- 5     **Estimate or Sketch Design Cost:**  
      This is the figure that is produced during the design development or Schematic Design phase of the project. It is based on drawings of the various options that are worked through to decide on the most suitable plan to prepare in detail.  
      Order of accuracy  $\pm 10\%$ .
- 6     **Tender Estimate or Tender Document Cost Plan:**  
      An estimate based on the tender documentation, required before the project is issued for tender.
- 7     **Quote / Quotation:**  
      The price received from contractors for a small jobs based on limited scopes of works and specifications.
- 8     **Tender Price:**  
      This is the price received from the tenderers and is the actual cost that the market has determined is applicable at the time of calling tenders. Generally prepared from detailed plans, drawings and specifications. Received, opened and evaluated under strict conditions in accordance with University Policy.