



THE SA STEM WORKS PROGRAM- SURVEY RESULTS

The STEM Works program was announced on 7th July 2016 by the SA Treasurer as a push by the State Government to provide upgraded or new Science, Technology, Engineering and Mathematics facilities for primary and secondary schools. \$250m was committed over three years for 139 projects in state schools, along with a loan program for private schools.

Tenders were called from DPTI prequalified architects on 15th July 2016 for indicative fees for primary (\$1m project total value), secondary (\$2.5m) and R-12 schools (\$3.5m) with tenders closing on 22nd July. The first round of acceptances to architects was issued on 15th August 2016 with a requirement for a planning study to be completed within six weeks of the date of the acceptance. Round Two project acceptances were issued from the beginning of September 2016 and Round Three from mid October 2016.

The STEM works programme is being contracted under a range of approaches with an apparent focus on speeding commencement on site.

The ACA and AIA conducted a survey of their members working on these projects to gather statistical information about where the process has experienced delays and therefore in what areas to focus attention to speed commencement and completion.

SURVEY METHODOLOGY

The survey was conducted over the week 9th-12th April 2017. Emails were sent to all contacts held by the AIA from previous meetings. There were 32 responses out of the 45 architects engaged in the program and results for 66 of the 139 sites. Given the short timeframe and the relatively complex nature of the survey, requiring details of dates and time periods, this was considered a representative result.

PROJECT COMMENCEMENT

Projects were unable to commence until a start up meeting was convened at the school including the school representative, DECD and DPTI personnel. 32% of projects waited more than two weeks for a startup meeting, with 55% of all project startup meetings being delayed by availability of DECD personnel (55%) and or school availability (48%). Also noted was the clash with holidays for later rounds, and the difficulty of coordinating a number of different stakeholders for those projects involving country travel.

PLANNING STUDY

Planning studies were required to be completed within 6 weeks after engagement, irrespective of commencement challenges noted above. 51% of planning studies were completed within six weeks of the initial start-up meeting, noting the delays in being able to organise that meeting. Of those that were not, the most common reasons were availability of DECD and school personnel (particularly if the Principal was on leave) and brief and budget issues. Due to timing of the rounds, school holidays were also an issue. Some planning studies were resubmitted more than once due to brief changes, and respondents noted that some projects were initially approved with new build and subsequently had to be redesigned for refurbishment only. Some schools had difficulty making decisions about such issues as which building to use, particularly if they felt entitled to additional area. Respondents noted that some planning studies are yet to be completed because of these complications.

It is apparent that the accelerated nature of the program meant that the architects were often sent into the schools before issues of capacity, building usage or issues not directly related to the program were resolved.

FEEDBACK AND APPROVALS TO PROCEED

The average time from submission of the planning study to the receipt of all feedback was 6.8 weeks, with some taking as long as 18 weeks. The average time from submission of the planning study to the request for Part 1 fees was 7.9 weeks. Seven projects received approval to commence concept reports before the end of 2016, and five of those were issued as the schools broke up for their Christmas vacation. 76% of the 66 schools in the survey have now received approval to proceed with Part 1 Concept report, although it is noted a number of these schools still had issues with brief or budget.

CONCEPT REPORT

50% of concept reports were completed as of Easter 2017 at an average time from start-up meeting of 5.5 weeks. Longer timeframes were attributed to availability of DECD, DPTI or school personnel and the school holidays, which delayed the startup meetings. Other issues included delays in school signoffs, budget issues and the fact that quantity surveyors were not allocated on some projects until well into the concept report phase. Also noted was a lack of a clear direction on ICT budgets, clear direction on capacity and spatial entitlements of schools, and the need for infrastructure upgrades to meet current codes.

NOVATION

27% of projects surveyed have been advised that they will be novated at 60%. A further 17% will be novated at an unspecified % and 18% that they not been advised they will be novated. Of those 18% to not be novated, all except one were R-12 or secondary school sites. 36% of respondent's projects have been advised of the builder(s) allocated for their project. Two projects have started on site.

DISCONTINUITY OF TEAM

The most common discontinuity in the team was the cost planner, as this consultancy was moved from the Lead PSC team to direct appointment after the planning study. A number of other projects reported a discontinuity in the team, the most common being a change of School Principal. This had led to significant redesign on a number of sites.

DPTI FEE ALLOWANCES

There had been a number of comments regarding the change in advice on total fee budgets between the Planning study and the Concept report phase. 44% of respondents noted that DPTI had advised that the fee budget was increased significantly; of those affected 43% said it had a significant effect of the project and 29% noted it had cause delays and rework of scope.

HOURS ALLOWED

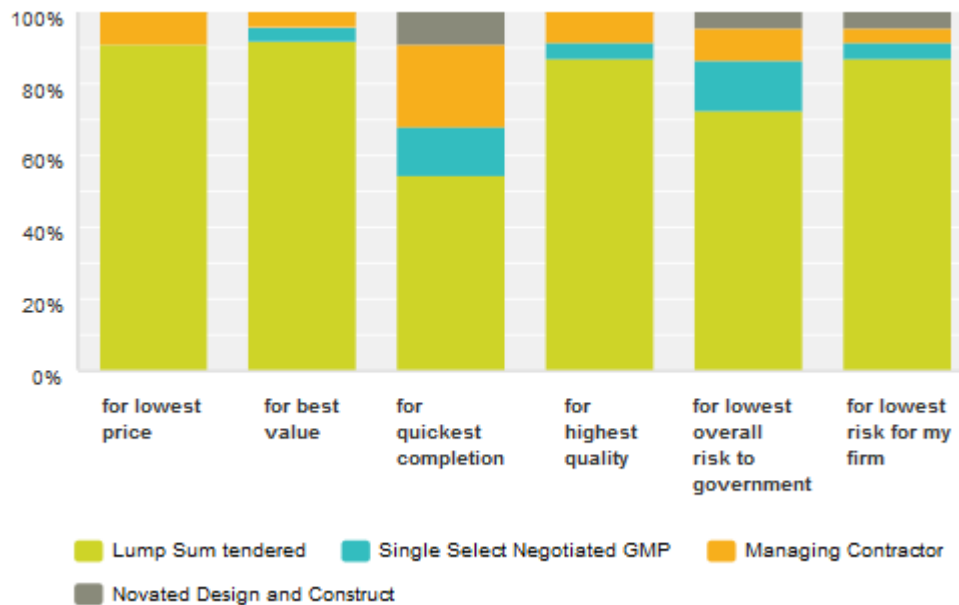
We asked whether hours taken on the the architect's projects to date were below, as estimated or above the estimated hours at submission of fees. Results were as follows:

below what we estimated at tender time	4.00%
about what we estimated at tender time	48.00%
more than we estimated at tender time	28.00%
much more than we estimated at tender time	20.00%

It is clear that if the process required significant rework or redesign more hours were spent than anticipated. It was noted in the comments of a number of respondents that their fees for Parts 1, 2 and 3 had been questioned as being "above benchmark". This indicates that for projects delivered under this implementation method, which has resulted in some projects requiring significantly more time than a standard DECD project, revised project specific benchmarks should be developed and applied.

FORM OF CONTRACT

We asked the following question: *For my projects the best form of contract would be:*



It can be seen that lump sum tendered was by far the most favoured form of contract for all categories. Only in the “quickest completion” did it dip below 72% of answers, and there Novated D&C only scored 9%.

CONCERNS REGARDING NOVATION

Most respondents noted concerns about proposed novation of contracts.

Concerns included:

Increased risk	95% of respondents
Requirements for certification of construction	83%
Lack of independence	83%
Possible setoff of fees against errors and omissions by Builders	88%
Possible reduction in design quality	92%
Possible insolvency of builders	71%
Uncertainty due to scope of services	83%
Uncertainty due to construction times and late finishing	71%

OTHER COMMENTS

There were a number of comments regarding the program timeframes. ACA had provided input in July 2016 on suggested timeframes, but the delays in resolving briefing issues and obtaining approvals has meant the actual design and documentation programs have often been sharply contracted. At the same time there were comments about the lack of advance warning for these accelerated programs, leading to programming and resourcing issues. Apart from the initial DECD briefing session there was no general communication with the industry to outline program issues.

CONCLUSIONS

It is clear from this survey data that the causes for delay in the majority of projects result from the ability of schools, DPTI and DECD to resource the time needed to attend meetings, make decisions of project scope and review proposals. Architects often attended startup meetings with little information or with conflicting information given by different DECD personnel.

Moving forward, these issues will continue to cause project delays irrespective of the procurement approach. Delays will potentially be exacerbated if construction teams have already commenced and claims for extensions of time are incurred.

In order to ensure effective and timely delivery of these projects without potential fall out later in the process, we suggest that DPTI and DECD resourcing and approval process are reviewed. A clear and consistent sequence of review and approval should be established and the capacity of DECD to resource should be established so that projects are batched to proceed with adequate time for feedback and projects are not let on inadequate documents because client input has not been received.

A focus on a smaller number of projects initially being better resolved to enable GMP contracts to be awarded will see these projects effectively commenced and into construction. The batching of projects would also enable subcontract pricing to be better managed resulting in better value for schools.

Given the resourcing shortages in DECD and DPTI personnel which will continue through the construction of these projects, the consultant teams should remain contracted to DPTI and utilised for client side reporting and management independent of the builder. A GMP approach will allow this model with the alternative being that government loses control during the construction phase due in an inability to resource it from within DECD or DPTI.