Control objective: to ensure the processes outlined in the Transport and Main Road's Project Cost Estimating Manual (PCEM) are being followed during the development of cost estimates.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prepared by**[[1]](#footnote-1)**: | | | Checked by**[[2]](#footnote-2)**: | | | | Date: | |
| Project Name: | | | Project Number: | | | | | |
| **Estimate Type:** | Strategic | Proposal | | Business Case | Preliminary Design | Detail Design | | Tender |

|  |  |  |  |
| --- | --- | --- | --- |
| A. Estimating business rule: Project scoping | | Y/N[[3]](#footnote-3) | Comments |
| 1. Is the estimate based on appropriate scoping for the stage of development? PCEM Section 4.1.1 (objectives, performance requirements, definition, scope) | |  |  |
| 1. Have factors influencing the estimate considered during the scoping process? PCEM Section 5.1 (scope, constraints, constructability, construction program, environmental, traffic, location, delivery method, sustainability and contract delivery) | |  |  |
| 1. Has the 'customer' agreed with the preferred solution? PCEM Section 4.1.1, 4.1.2 and 4.2 | |  |  |
| 1. Has a site visit been undertaken, and Site Visit Checklist completed? PCEM Section 4.1.3 and Annexure A | |  |  |
| 1. Has consultation undertaken with key stakeholders, to ascertain potential impacts of the project scope? PCEM Section 4.2.1 and 7.4 (traffic, planning, community, industry, emergency services, PUP) | |  |  |
| B. Estimating business rule: Estimate preparation and presentation | | Y/N3 | Comments |
| 1. Has the estimate development been based on the current version of PCEM? PCEM Section 5 | |  |  |
| 1. Has the appropriate estimating method been used for the project type / stage and approved by the Project Manager? PCEM Section 9.2 (unit rate, first principles, global estimate, Types 1, 2 and 3) | |  |  |
| 1. Has the estimator used recommended practices within the department to develop the cost estimate? PCEM Section 2.5 | |  |  |
| 1. Is the estimate presented in OnQ / 3PCM system documentation? PCEM Section 7 (Construction / non-construction WBS, WBS Level 3 and 4, project management / work management and Cost Breakdown Structure) | |  |  |
| 1. Is the estimate broken into appropriate project estimate structure components? PCEM Figure 3.1(b) (DJC, IJC, overheads and profit, TMR costs, inflation) | |  |  |
| 1. Has appropriate work break down and cost breakdown structures used? PCEM Section 7.1, Section 7.1.3 | |  |  |
| C. Estimating business rule: Pricing | | Y/N3 | Comments |
| 1. Has the estimate been benchmarked against district benchmarking data? PCEM Section 8 (global rates, key item rates, construction production rates) | |  |  |
| 1. Have work method studies been considered during the estimate development? PCEM Section 5.1 (constructability, traffic management, site conditions, construction methodology, haul quantity and distances, borrow / spoil requirements) | |  |  |
| 1. Have the Principals costs calculated from first principles? PCEM Section 3.3.1, Table 3.3 | |  |  |
| 1. Do the Principals costs include costing for all the phases / components? PCEM Section 3.3, Table 3.3 (project management, principal’s obligations, resumptions, PUP, principal supplied materials, service levies, environment) | |  |  |
| 1. Have historic rates used to prepare the estimate? If so, have rates used adjusted prior to use as per the conditions set out in PCEM? PCEM Section 9.1.2 (inflation, site / market conditions, location, overheads) | |  |  |
| D. Estimating business rule: Risk | | Y/N3 | Comments |
| 1. Has the appropriate risk assessment approach used to produce P90 estimate? (Quantitative approach for Major Projects, Type 1 and Type 2, Qualitative for Type 3) PCEM Section 2.5.2 and 10.3 | |  |  |
| 1. Has an appropriate risk assessment technique been used? PCEM Section 10.3.1, Section 10.3.2 (risk workshop, review past docs) | |  |  |
| 1. Is the risk management approach used appropriate for the project category (Major Project, Type 1 and 2 must use probabilistic risk evaluation approach)? PCEM Section 2.5.2 | |  |  |
| 1. Has the risk workshop undertaken to assess and verify risks as appropriate? PCEM Section 2.5.2, Section 10.3.2.1 | |  |  |
| E. Estimating business rule: Contingency | | Y/N3 | Comments |
| 1. Have the financial allowances made against risks and their treatment been used to determine the appropriate contingency allowance? PCEM Section 10.2 | |  |  |
| 1. Is the project contingency allowance within the contingency range for this stage? PCEM Table 3.4 | |  |  |
| 1. For Major projects and Type 1 and Type 2 projects, have appropriate contingency allowances made against individual cost change categories? PCEM Section 3.4, Section 10.2 | |  |  |
| 1. Have the cost change risk categories considered during risk evaluation process? PCEM Section 10.8 | |  |  |
| 1. Has the appropriate contingency review process undertaken prior to the approval to satisfy the APDV process? PCEM Section 2.6.7.1, Section 5.4.4 | |  |  |
| F. Estimating business rule: Escalation | | Y/N3 | Comments |
| 1. Has the escalation calculated in accordance with current percentage rates? PCEM Section 3.5 | |  |  |
| 1. Has the escalation calculator used to value the escalation amount? PCEM Annexure H | |  |  |
| 1. Has the PCB template developed for project that were funded by the Australian Government? PCEM Section 2.5.1, Section 3.5 | |  |  |
| G. Estimating business rule: Review and approvals | | Y/N3 | Comments |
| 1. Has an estimate subjected to review at appropriate levels? PCEM Section 4.1.11 (peer review, concurrence review, program review) | |  |  |
| 1. Has the evidence of reviewer’s feedback submitted along with the estimate for approval? Has feedback been actioned to the reviewer’s satisfaction? PCEM Section 4.1.11.1 | |  |  |
| 1. For all large and complex projects: has suitable and independent reviewer appointed for concurrence review? Has the recommended process followed? PCEM Section 4.1.11.2, Figure 5.3.3.1(a) and 5.3.3.1(b) | |  |  |
| 1. Have necessary approvals obtained in the Project Cost Estimate (Summary) and (Approval) form? PCEM Section 4.1.12 and Annexure L | |  |  |
| H. Estimating business rule: Lessons learned | |  |  |
| 1. Has the estimate captured in 3PCM solution for lessons learned purposes? PCEM Figure 2.5.1, 2.5.4, 2.6.9, 2.6.10, Section 4.1.12, 4.2.1, 4.2.2 and 8.5 | |  |  |
| Satisfactory (expected process controls are in place and used satisfactorily)  Unsatisfactory (attach details of any controls that in your opinion are not in place and/or are not used satisfactorily)  Approved  Not approved | | | |
| Signature:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Date:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | |

1. To be completed by the Estimator. [↑](#footnote-ref-1)
2. To be checked by the Project Manager / Program Manager. [↑](#footnote-ref-2)
3. If yes, documentary evidence must be made available to the Region / District Director. [↑](#footnote-ref-3)