

The Importance of Engineering Cost Control in Completion Settlement Auditing Phase

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Abstract: Construction project completion settlement auditing is one of the important stage of the project cost control. The stage of audit work is directly related to the project owners and construction unit vital interests. Audit results determine the project cost ultimately, which is underlines the importance of the audit work. This article mainly discusses about the importance of completion settlement auditing, the audit work what data should be based on audit work should be how to the entrance, and how to audit completion and settlement aspects.

Introduction

For a long time, the status of budget estimation outrunning estimation, budget outrunning budget estimation and final accounts outrunning budget in engineering has been not well resolved. It lets the national economic construction suffer a great loss. Completion settlement auditing phase is the last stage of the project cost control, audit results will determine the final cost of construction projects, and therefore, strengthening the management of completion settlement audit work is great significance for the effective control of the project cost.

The Importance of Working in Completion Settlement Auditing Phase

Settlement construction is completed by the construction unit specification document prepared on the basis of economic data and valuation completion of settlement. Construction units calculate the project cost and valuation rules in accordance with the amount actually incurred, audited project completion settlement is not only a basis of construction cost, but also a basis of completing the preparation of accounts and approving new fixed assets after acceptance of the construction project. Construction project completion settlement is directly related to the vital interests of the project owner and construction unit. In order to prevent the construction unit overestimated budget, determine the correct and reasonable project cost, project owners, supervision units and audit departments must seriously review the work of completion settlement auditing, and grasp the last line of the project cost control program.

The Basis of Completion Settlement Auditing

1. Construction contracts, construction agreement or supplementary contracts.
2. Completion of the project plans and design drawings.
3. Project completion data.
4. The joint trial record of drawings.
5. Design ECN.
6. Engineering negotiating record.
7. Supervisor engineer notification or employer construction instruction.

8. Meeting minutes.
9. Site technical, economic visa approved single.
10. Materials and equipment price review list.
11. The receipt of materials and equipment provided by party.
12. Project settlement books and electronic documents with the official seal.
13. Bidding documents that contains BOQ and The tender Q&A summary.
14. Construction units' tenders, which include the commitment and related electronic documents, etc.
15. Contact list of work-start reports, completion report and duration extension.
16. Other related impact of the project cost, schedule, etc.

Completion Settlement Audit Scope and Content

1. Completion audit is complete settlement prepared on the basis, in line with the relevant provisions.

When auditing, prepared in accordance should compliance relevant state regulations, Information and procedures should to be complete, dealing with the remaining issues should be comply with the relevant provisions.

2. Quantities auditing are accurate.

Quantities is a major factor in determining of the project cost, approving the quantities that completed actually by construction unit is the key to project completion audit settlement. Then, we should pay attention to examine the hidden works acceptance records, review its procedures whether completeness or legality, review for compliance with design specifications and quality acceptance that whether related to regulatory requirements.

3. Audit norm form is reasonable.

The main part of the project to review whether it is reasonable to apply quotas, it is consistent with the fixed standard works to be executed, whether the sub-project budget quota and design documents listed in the project budget are consistent. Whether project name, specifications and calculation units are consistent .so we should correctly grasp the budget quota applied, avoid high sets, wrong sets increase the project cost.

4. Review the material unit price is reasonable.

The review is mainly that engineering materials unit budget whether according to the tender documents and construction contract which determine the unit price.

5. Audit fees billing is correct.

The review is mainly that safe and civilized construction fee whether implement "safe and civilized construction cost management approach".

Completion Settlement Auditing Methods

Due to the different size of the project, simplified level, construction methods and the case of construction companies are not the same, the quality of the completion settlement perpetrated by construction units are not the same. As the audit departments, we should give full play to the role of control and supervision in all aspects of the construction project cost control and management, both to ensure the project cost authenticity and objectivity, and be able to work quickly and efficiently. Under the premise of improving audit quality, maximize costing savings audit and improve audit efficiency. So take a different audit methods depending on the characteristics of the construction project is particularly important. Completion Settlement auditing methods are itemized review, comparative review of the law, the focus of the review, standard budget review law, and the use of screening methods such as manual review. Usually based on work experience, it describes the following common auditing method only for your reference.

1. Itemized review methods.

Itemized review methods, also known as a comprehensive review of laws. Its advantage is comprehensive, detailed and high examination quality, good effect, but its drawback is that the heavy workload, long time. So this method is suitable for smaller quantities of some process relatively simple project.

2. Critical review method

The advantage of critical review method is focused, the review time is short, good effect. This method is mainly applicable to large projects, higher cost, engineering structures complex projects.

3. Standard Budget Review method

Standard budget review method is a way to review project budget, which concentrating on the preparation of standard budget and use of standard drawings or general construction drawings. The advantage is that time is short, effective, easy to be finalized. The disadvantage is that it has a small scope and applies only to the use of engineering standards drawings.

The Methods and Measures for Controlling Project Cost in the Phase of Construction Project Completion Settlement Audit

In completion settlement audit stage, the project cost control must be controlled from the construction unit (the owner), the cost of consulting firms and specific audit technician.

Project owner as an investor of projects should pay attention to the project cost control, in the completed stage, the project owner must strengthen control over the management of completion data and completion of the settlement amount. Completion data as the basis of completion settlement directly affect the project cost, some construction units providing false and untrue completion data in order to obtain greater economic benefits. Since the completion settlement auditing staff did not participate in the project construction process, not fully completed objectively determine whether certain information is true, so we must require the cost member getting rid of the untrue in formations when receipting completion data. Project owner can adjust the magnitude of the settlement amount that submitted by construction unit to achieve the purpose of the project cost control. For example, the construction sector in a city provided that the completed settlement amount submitted by construction unit cannot exceed 15% of the bid amount, otherwise it is not allowed to submit audit department. This move not only be able to control the construction unit overestimated budget, and also avoid excessive construction project design changes occur during the construction phase.

Cost consulting company as the Executive body of completion settlement auditing is very important. Audit departments must choose the high quality cost consulting company; it requires cost consulting firm which was commissioned must have the appropriate qualifications, fixed work place and cost consulting technical personnel composition.

Completion Settlement auditors as audit specific implementation, who's status is critical, important Conclusion. Cost consulting firm must assign the cost member who both has the high professional quality and extensive audit experience, but also have good professional ethics to do Audit work.

Conclusion

In all, completion settlement auditing is the final stage of the project cost control, which is the necessary procedures that determine project cost reasonably, project owners, supervision units and audit departments must seriously review the work of completion settlement auditing, effectively improving the completion of settlement auditing, ultimately determining a reasonable project cost, and achieving the goal of the project cost control. It not only needs auditors with high professional quality and rich experience in auditing, personnel need to have a good work ethic and a high political consciousness, It simultaneously needs project owners, supervision units and construction units and other related personnel actively cooperate.

References

- [1]Qingliang ZOU. Construction Cost Management[M].Beijing : China Building Industry Press. 2008. 03(349).
- [2]Xintian MENG. Civil engineering budget and list valuation [M]. Beijing Higher education press .2006.05(192)
- [3] Min ZENG. Probe on the Control and Management of Construction Cost [J]. Value Engineering, 2010, 29(9).
- [4]Ping SHI. Management and Control of Construction Cost [J]. Value Engineering , 2010, 29(33) .
- [5]Xiuhua SHI. Effective Control the Project Cost of Construction Enterprise [J]. Technology Wind, 2010,12(14).
- [6]Pei LI,Meiyuan ZHANG. Discourse On the Control and Management of Construction Cost [J]. Shanxi Building, 2010,11(58).