



# Main Problems Existing in the Process of Civil Engineering Construction and Optimization Suggestions

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**Abstract:** Relevant data show that in recent years, the number and scale of civil engineering projects in China have gradually increased, which has effectively promoted the improvement and optimization of the level of urbanization. However, in the construction process of civil engineering projects, due to the influence of many factors, the quality of related projects often has certain problems that need to be improved. Based on this, the researchers pointed out that in order to further realize the improvement and optimization of the comprehensive quality of civil engineering projects in China, relevant units should actively conduct a reasonable analysis and exploration of the engineering construction process, so as to we can summarize and summarize the construction quality problems according to the actual situation, and formulate corresponding optimization suggestions, and lay a solid foundation and guarantee for the optimization of China's civil engineering construction technology level. In this study, the researchers combined a large amount of data to analyze the main problems existing in the construction of civil engineering in China, and put forward corresponding optimization suggestions, and aiming to further improve the comprehensive quality of civil engineering projects in China.

**Keywords:** Civil Engineering; Construction Links; Main Points of Work; Main Problems; Optimization Suggestions

Researchers said that in the process of civil engineering construction, as one of the important components, the overall quality of the construction stage has an important impact on the performance and stability of the project. However, at present, after analyzing a large number of project data, it is found that at this stage, there are still certain deficiencies in the construction process of civil engineering in China that need to be improved. In response to related issues, construction companies should rationally reflect on the content of their work, and actively formulate corresponding optimization strategies, so as to lay a solid foundation for the improvement of the comprehensive quality of civil engineering construction in China.

## 1. Main problems in the process of civil engineering construction

### 1.1 Weak professional ability of construction personnel

A large amount of research data shows that at this stage, in the civil engineering construction team of China, the professional ability of some construction personnel is relatively weak, which limits the further improvement of civil engineering construction quality, and it has caused extremely adverse effects on the improvement of the comprehensive level of civil engineering projects in China. In response to this problem, the researchers pointed out that due to the relatively weak professional knowledge and ability, the professionalism of civil engineering construction personnel is often relatively low. Based on this, in daily work, it is difficult to realize the systematic analysis and exploration of civil engineering projects, which limits the improvement of engineering construction level and has an adverse effect on the

implementation of engineering construction standards. On the other hand, due to the relatively low professional ability, the work enthusiasm of the construction personnel is often relatively low, which is not conducive to the reasonable realization of the orderly implementation of the work content, and is extremely detrimental to the optimization of the construction quality of civil engineering in China.

## **1.2 Weakening of engineering equipment and material management**

In the process of civil engineering construction, as one of the important components, construction equipment and engineering materials have a vital influence on the quality of engineering construction. However, at present, in view of the above content, some construction enterprises do not achieve reasonable control in the process of construction, which leads to the construction equipment performance and material quality is difficult to be reasonably guaranteed, and then has a bad impact on the improvement of the comprehensive level of civil engineering. For example, during the construction process, some construction enterprises did not reasonably implement regular maintenance and disposal of construction equipment. At the same time, construction enterprises paid relatively little attention to the placement and storage of construction materials. Based on this, relevant content Performance often has a certain deployment to be improved, which leads to certain safety hazards in the civil engineering construction process.

## **1.3 The comprehensive level of construction technology is relatively low**

In the process of civil engineering construction, the level of construction technology often has a certain impact on the overall quality of the project. In response to this problem, the researchers pointed out that, at this stage, the technology used in the construction of civil engineering in China is relatively traditional, which has affected the quality of construction to a certain extent. At the same time, under the influence of this factor, it is often difficult for some managers to reasonably realize further analysis and exploration of the construction quality of the project, which is not conducive to the further improvement of the project quality. And due to the weakening of the technical level, the construction efficiency of related projects is often relatively low, which prolongs the construction period of civil engineering, which in turn leads to a substantial increase in construction costs, and has a negative impact on the protection of economic benefits of construction enterprises.

## **1.4 The comprehensive level of engineering supervision is low**

At present, most civil engineering construction enterprise focus on project cost management and project schedule issues, but the degree of attention to the quality of project construction is relatively low. Based on this, in the process of engineering construction, it has not effectively achieved the establishment and improvement of the supervision team, which is not conducive to the orderly development and implementation of supervision work, and has an adverse effect on the reasonable guarantee of the quality of civil engineering construction. On the other hand, due to the lack of supervision system, construction companies often find it difficult to reasonably realize timely detection of potential engineering problems, which is not conducive to the maintenance of engineering safety, and has a certain impact on the life and stability of civil engineering. On the other hand, due to the lack of regulatory system, construction enterprises are often difficult to reasonably realize the timely discovery of potential problems in engineering, which is not conducive to the maintenance of engineering safety, and has a certain impact on the life and stability of civil engineering.

# **2. Relevant ways to improve the comprehensive level of civil engineering construction**

## **2.1 Organize construction personnel to conduct regular training to build a team of high-quality construction talents**

For civil engineering construction enterprises, in order to further realize the improvement and optimization

of project quality, in their daily work, they should organize construction personnel to conduct regular professional knowledge learning and training according to the actual situation, so as to ensure that construction personnel can better achieve the systematic understanding and effective mastery of advanced construction technology, will then lay a solid foundation and guarantee for the improvement and optimization of construction quality. On this issue, a large amount of data shows that through the implementation of regular supervision and training, construction personnel can better master advanced civil engineering construction technology, so as to ensure that they strictly abide by industry norms and technical standards during construction. The reasonable improvement of the construction quality of the project has good promotion significance. On the other hand, through the development and implementation of related learning work, construction personnel can better realize the rational application of equipment and new materials, which has a good guiding effect on the improvement and optimization of civil engineering construction efficiency.

## **2.2 Improve the management system based on actual conditions to ensure the reasonable development of construction work**

In the process of civil engineering construction, in order to better realize the improvement of the overall quality of the project, the construction enterprise should make a good job in the formulation and improvement of the construction link management system in accordance with the actual situation, so as to further realize the reasonable specification of each detail work for the construction of civil engineering, and provide assistance for the improvement of the comprehensive level of civil engineering construction. In terms of specific practices, the enterprise should properly formulate the effective construction management system, and then promote the detailed development of various work contents to lay the foundation for the optimization and improvement of the construction quality of the project. For example, the construction equipment, personnel operation, material management, engineering structure design and completion inspection involved in the process of civil engineering construction, through the formulation of the system, can better ensure the reasonable implementation of related work. Specifically, with regard to the management and control of civil engineering construction materials, through the formulation and improvement of management systems, construction enterprises can formulate special personnel to manage civil engineering construction materials, so as to better carry out reasonable analysis and exploration of management methods based on the properties of materials, so as to realize the strengthening of the standardization of material management. Practice has shown that through the development and implementation of related work, it is conducive to the reasonable placement and effective use of materials on the construction site, and it has a good promotion significance for the improvement of the level of material management and the optimization of civil engineering construction safety.

## **2.3 Actively introduce advanced construction technology and improve the efficiency of civil engineering**

The researchers pointed out that in the process of civil engineering construction, in order to achieve reasonable to promote the efficiency of project construction, construction enterprises should actively prepare for the introduction of advanced construction technology and application, so as to better the implementation of the work mode, the transformation of traditional construction technology for civil engineering construction efficiency significantly increased with reasonable optimization lay a solid foundation and the guarantee. On this issue, relevant data show that through the application of advanced construction technology, construction personnel can better ensure that the construction content of the project conforms to the design specifications, which has a good promotion significance for the further guarantee of the tightness and stability of the project. In response to related issues, the researchers conducted corresponding comparative investigations. Practice shows that through the introduction of new technologies, the efficiency of civil engineering construction can be increased by 20% to 30%. Based on this, construction enterprises can greatly shorten the construction period of the project. The reasonable guarantee of comprehensive benefits has positive value.

## **2.4 Promote the construction of civil engineering supervision team and promote the scientific**

## adjustment of construction links

From a development perspective, in the process of civil engineering construction, in order to better guarantee the quality of the project, the construction unit should actively build and improve the supervision team, so as to effectively realize the scientific adjustment of the construction process. In response to this problem, related investigations have shown that through the creation of a supervisory team, construction enterprises can timely conduct a comprehensive analysis and control of the construction status of each link in the civil engineering construction process, thus effectively guarantee each link of the construction of reasonable implementation, to ensure the effective connection between different construction team at the same time, and it has laid a solid foundation for the promotion of the comprehensive level of civil engineering projects. On the other hand, the smooth development and implementation of supervision work is conducive to the timely correction of civil engineering construction problems, which is of great importance to the reasonable improvement of the comprehensive level of engineering projects.

## 3. Conclusion

In the process of civil engineering construction, the development and implementation of engineering construction links often have an important impact on the overall performance of the project. Based on this, the researchers said that construction companies should actively conduct a reasonable analysis and reflection on the construction situation of civil engineering, and at the same time actively formulate and improve optimization strategies based on actual problems, so as to lay a solid foundation for the overall improvement of project construction quality. It then provides a strong impetus for the development of urbanization in my country. In terms of specific practices, construction companies should start from multiple perspectives such as personnel, equipment, materials, technology, and supervision, and actively carry out construction management in an all-round way, so as to provide a strong guarantee for the optimization of the overall quality of civil engineering projects.

## Reference

1. Shan K. Discussion on the construction management of civil engineering construction site (in Chinese). *Sichuan Cement* 2020; (3): 214.
2. Zhang W. Quality control strategy in the process of civil engineering construction (in Chinese). *The Farmers Consultant* 2020; (6): 155.
3. Li X. Treatment of quality problems in civil engineering (in Chinese). *Industrial Technology Innovation* 2020; 2(8): 61–62.
4. Xia J. Energy saving and environmental protection technology in civil engineering site construction (in Chinese). *Science & Technology Information* 2020; 18(8): 31+33
5. Zhang L. Research on the problems and countermeasures of civil engineering construction management (in Chinese). *Chinese Residential Facilities* 2020; (2):111–112.
6. Yuan K. Discussion on the problems and innovations in the construction technology of civil engineering (in Chinese). *Modern Property* 2020; (1): 246.
7. Du Z, Zhang B, Chen Z. Analysis of Problems in Civil Engineering Construction Management. *Value Engineering* 2020; 39(1): 16–17.
8. Ma S. Research on Construction Technology and Innovation of Civil Engineering Building (in Chinese). *Building Materials and Decoration* 2020; (2):37–38.