

## *Original Paper*

# Thinking on the Planning and Construction of Battalion Area in Military Academies (Note)

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### ***Abstract***

*The reform of the new institutional structure has brought new opportunities and challenges to the construction and development of the PLA's academies. How to seize the opportunities, better adapt to the new situation, fulfill the new mission, complete the new tasks and realize the new leap has become an important issue facing the PLA's barracks planning and construction. Combining with the experience of the main camp planning and construction in colleges and universities, this paper will timely reflect on the key issues such as the mode of camp planning and construction in colleges and universities, which may be beneficial to our work.*

### **1. First, to Accurately Grasp the Camp Planning and Construction Mode**

To fulfill the PLA's new historical mission in the new stage in the new century, we must make good preparations for the military struggle against "Taiwan independence" and push forward the military reform with Chinese characteristics. At the same time, with the deepening of the institutional restructuring and the use of modern teaching means, the reconstruction and expansion of the barracks are imperative. How to solve the contradiction between the actual construction and development of the camp as soon as possible requires us to study and demonstrate seriously, and take different planning and construction modes according to different situations. Under the urban density, there are roughly three modes for the planning and construction of college barracks: overall relocation, construction of new parks and in-situ reconstruction and expansion.

1) Overall relocation: Due to the large enrollment scale of the school, the expansion and development of the original barracks area are seriously restricted, or due to the high decentralization of the original several barracks areas after the merger of colleges and universities, many contradictions are brought to the teaching and management. Only the overall relocation can solve the contradictions.

2) Construction of new park: In order to meet the needs of training tasks and realize the goals of large-scale education, modern teaching, standardized management and social security, the school requisitioned land for the construction of the new campus through land replacement. The construction of the new campus not only guarantees the need of new training tasks, but also creates a large space for the future development of the school and promotes the development and construction of new urban areas.

Adopting the above two construction modes requires expropriation of a large area of land and raising a large amount of funds. It is very difficult to obtain approval after repeated demonstration. Moreover, the construction period from repeated demonstration, approval and approval to phased completion is very long.

3) In-situ reconstruction and expansion: For most colleges and universities, the original land can meet their construction and development needs through functions adjustment and socialization reform of logistics support, or there are urban land for colleges and universities in the surrounding areas, so the in-situ reconstruction and expansion mode should be preferred. This mode is more in line with the viewpoint of sustainable development, because it can force people to economize on land and explore various ways to develop effective land, so as to increase valuable school space and build environmentally conscious buildings. At the same time, this mode is conducive to exerting resource benefits and realizing resource sharing.

## **2. Second, We should Deal Scientifically with the Three Relations, That Is, the Relations between the New Construction Project and the Original Barracks, Development and Environmental Supporting Facilities**

The planning and construction of colleges and universities should carry out the scientific outlook on development, adhere to the task demand as traction, on the basis of camp planning, highlight the construction of teaching and scientific research guarantee conditions, pay attention to the construction of living guarantee conditions, strengthen the construction of infrastructure. We should pay attention to absorbing advanced experience and knowledge for our use. Efforts should be made to keep pace with the construction and renovation, lay equal emphasis on scale and efficiency, and further improve the school's ability to guarantee education, so as to provide a solid foundation for personnel training and scientific research in schools. In the process of planning and construction, the following three aspects should be dealt with scientifically:

1) Properly handle the relationship between the new construction and the original barracks. Colleges and universities resources of existing building is formed after decades of construction and development, for the new development and construction laid a certain foundation, in the preparation of a new planning, attention should be paid to give full play to the role of the resources of existing building, inherit the historical features of the campus, following campus architectural context, and transform and new synchronization.

2) Properly handle the relationship between new projects and development. The most direct and important influencing factors are the education mode and the development of architecture. New construction projects should adhere to the comprehensive, coordinated and sustainable point of view, scientific layout and design, increase the flexibility and practicality of space use, pay attention to improve the public service space, create a space for communication, so as to facilitate interdisciplinary, resource sharing.

3) Properly handle the relationship between new projects and supporting environmental construction. The basic requirement of first-class university is to have first-class hardware environment, and “environment education” is the core goal of humanistic concept in the creation of campus environment. The whole process of project construction must start from the environment, pay attention to landscape, ecology, landscaping and other environmental construction and road, pipe network, sewage treatment and other supporting infrastructure construction, so as to ensure the synchronous construction of environmental supporting and new construction; The inherent characteristics of the base should be emphasized, not only the original green space, water surface and ecology should be kept as far as possible, but also the harmony and unity of humanistic environment and natural environment should be achieved to provide a harmonious and human development space for teachers and students.

### **3. Third, to Ensure the Quality of Planning, Design and Construction**

To speed up the construction of colleges and universities, to achieve leapfrog development, and create conditions of high standards, high level and campus environment, urgently need to be based on a high starting point planning, high level design, high-quality construction, outstanding educational condition and environment construction, vigorously promote the school overall strength and image, to build a training, scientific, and cultural atmosphere.

1) Ensure the quality of planning. Planning is the strategy of development, the program of construction and the basis of management. In the construction and management of camp areas, we should pay attention to and strengthen the scientificity and sustainability of the planning.

First, make full investigation and research. The investigation includes the current situation, history, culture and other aspects of the camp. The focus of the investigation of the control planning is the status quo investigation, including the layout of barracks, road traffic, construction structures, quality of barracks, teaching equipment, environmental quality, auxiliary facilities and so on. Only when sufficient investigation is carried out can effective analysis and research be carried out so as to find out solutions and put them into the planning.

Second, we must grasp the key issues. The establishment of the plan should have a clear guiding ideology and grasp the following key issues on the basis of the functional orientation of the camp: first, the training scale of the school; second, the large functional division; third, the road traffic network; fourth, the environment and ecology of the camp; fifth, the landscape and the setting of diversified open space. The scale of training mainly refers to the scale of camp land and the scale of trainees,

which should meet the target of planned land use. Meanwhile, the particularity of the land used by military academies should also be taken into account. Functional partition is mainly the function of the teaching, life, activities such as band division to the scientific, reasonable and feasible, is advantageous to the macro control, its form should have a certain ability to adapt. The road traffic network is mainly the classification and network structure of campus roads, and its vehicle traffic system and walking system should be convenient and unobstructed, and directly connected with various campus resources, that is, “accessible”.

Third, consult employees for extensive participation. The compilation of camp planning depends on the majority of staff, through the campus network and other channels to widely listen to the opinions of the masses, and pay attention to their feedback, seeking truth from facts, in order to facilitate the smooth implementation of camp planning. At the same time, through soliciting opinions and introducing the situation, so that the majority of staff to understand the planning, so that they can proceed from the overall situation of the school development and construction, do partial obedience to the whole, support the school camp construction.

2) Ensure design quality. Engineering design is a construction project to conduct a comprehensive planning and detailed account of the process of the implementation of intention, is the soul of engineering construction, is the science and technology into productive force and fighting capacity of the link, is the key link, the processing technology and the economic relationship is the basic construction of the most complicated and tedious work, it needs long cycle, the face of the involved, directly affect the effect of engineering construction. Colleges and universities are teaching and scientific research units. While paying attention to the construction of aesthetics, they should pay more attention to the rationality and practicability of functions, strengthen the design principle of “applicability, economy and aesthetics”, and pay more attention to the comparison of advantages and disadvantages of schemes and economic benefit analysis, so as to ensure the design quality and improve the investment benefit.

First, we must ensure that the functions of construction projects are scientific and reasonable. Reasonable function is the basic requirement of engineering design, modern university architecture and environmental design must first meet the functional requirements, from the construction project design specification preparation to the construction drawing design must always pay attention to the flexibility and applicability of space use. Practice has proved that the adoption of universal, modular and standardized architectural design and flexible and changeable open space design will create a learning, living space and communication environment full of humanistic order. Want to strengthen next with use unit, design unit is coordinated, communication. Teaching and scientific research buildings, especially the scientific research and experimental buildings with high technological requirements, need frequent communication and coordination due to the complexity of technology and strong professional, so as to effectively transform professional requirements into the vocabulary of engineering design, avoid unreasonable design, and enhance the applicability of engineering design.

Second, we must ensure the investment benefits of construction projects. The engineering design should make scientific, reasonable and effective use of various resources, so as to be applicable, safe, economical, low consumption and conform to the ecology. In the construction of barracks buildings, we should pay attention to the comparison of the advantages and disadvantages of the schemes and the analysis of economic benefits, and establish an effective cost control system. In the process of engineering design, the rationality of technology and economy should be explained by calculation and data if the design content can be quantitatively analyzed.

Third, it is necessary to ensure that the construction project is novel and characteristic and harmonious with the campus environment. The building itself is a trinity of planning, monomer and environment. As a type of architecture at a higher cultural level, college architecture, due to its own particularity, should strive to combine science, art and environment to fully reflect its cultural connotation and create a certain atmosphere. In the design, we should strive to express the authenticity of the building, use modern architectural design techniques, pay attention to the complex and individual buildings themselves, harmony and unity with the surrounding environment, make it naturally.

3) Ensure construction quality. Construction management is a systematic project and dynamic management. In the process of management, to grasp the “three levels” to ensure the quality of the project.

First, we must do a good job in bidding for construction projects. We must resolutely implement the relevant regulations on bidding and tendering for construction projects for the state and the armed forces, follow a fair, open and fair tendering approach, and adhere to a scientific attitude of seeking truth from facts and a clean work style of performing official duties. First, it is necessary to strictly organize the pre-qualification of bidding and the investigation of the bidding units, implement the one-vote veto system for the bidding units with bad records, and select the construction units and project managers with strong strength, excellent work style and good reputation.<sup>2</sup> It is to invite disciplinary inspection department, auditing, accounting or related business department to participate in the whole process of project bidding, conditional unit, should find a way of social tender place with appropriate qualifications entrusted by the procuratorial agency in public bidding, in order to increase the transparency of the bidding work and the evaluation work of scientific and authoritative. The third is to adopt the method of bidding without pre-tender estimate and the lowest bid price.

Second, we must supervise and manage the quality of construction projects. First, it is necessary to actively promote the supervision engineer system, optimize the project supervision units with strong technical force and high quality personnel, and strengthen the whole-process control of project quality. Second, to further establish the key management system, give full play to the management functions. The construction side should not only give full play to the functions of management, regulation and supervision in terms of project quality management, but also fully help the construction units to improve their own management and supervision institutions in the process of construction, so that the two can infiltrate each other in business, restrict each other in relation and promote each other in

technology. Third, flexible management means should be adopted. Construction workers are the builders of project quality, mobilize their enthusiasm, improve their ideological quality, will be greatly conducive to our project quality.

Third, we must do a good job in the acceptance of construction projects. To strict basis, according to the design requirements and relevant acceptance standards, regulations and rules, so that there is no fear of problems, not afraid to ask questions, to solve the problems before the completion of the project delivery and use; To standardize procedures, to adhere to the construction, supervision, construction and quality supervision of the “3+1” mode of grading acceptance, on-site inspection and testing; To pay close attention to two in place, namely quality in place, material in place.

#### **Note**

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