

RECOMMENDATIONS ON THE BASIS OF MODERN TECHNOLOGIES ON THE FEATURES OF ORGANIZATION OF CALENDAR PLAN FOR THE CONSTRUCTION OF A CAR PLANT

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Annotation: This article envisages the development of a working calendar program for the planning and design program of the automotive project facility, which is one of the modern design facilities that is developing from year to year.

Keywords: Calendar work plan, car project, modern software, Chief Builder, Plan WIZARD, graphic work plan.

Relevance of the topic President of the Republic of Uzbekistan Sh.M. The adoption of Mirziyoyev's decree "On the strategy of further development of the Republic of Uzbekistan" in 2017 took the reforms to an entirely new level. In accordance with this decree, a development program for 2017-2021 has been developed, which identifies five priorities for the country's development. All five priorities are aimed at improving the living standards of the population and ensuring their well-being. In particular, the program will lead to the further development of housing, modernization of the leading industries of the economy, which in turn will place a huge task on the sector.

For many years, there have been no significant changes in the methodology of technical inspections of buildings, but recently, this problem has been understood in government agencies and is adequately assessed. Processes aimed at improving the safety of buildings and structures are intensifying, both at the legislative and executive levels. The life cycle of a volunteer building includes

several stages: design, construction, operation, overhaul, and in some cases, reconstruction, demolition, and demolition. The operational phase is the longest in time, and without a doubt, security is the most pressing issue at this time. The quality of technical maintenance of the building - timely and adequate implementation of repair activities,

Physical deterioration of an object can be detected at the stage of visual inspection. However, the Department of Building Norms VSN 53-86 (r), which is currently the main document defining the methodology for calculating the physical deterioration of buildings on the basis of visual observations, requires relevance as a result of new building materials and technologies for constructive solution of building elements. however, it does not provide a clear understanding of the relationship between observable defects and physical depreciation values.

Recently, information technologies and programs aimed at implementing processes in the form of visualization, complex technical calculations and 3D models have become more widely used, so technical evaluation should also use modern processes. Using the method of determining the physical deterioration of the structural elements of buildings and the processing of the obtained data, the operating company can form the initial data for the approximate calendar planning of repair and construction works. After the second phase of the technical study with the involvement of expert builders, changes can be made to the calendar plan; such an approach is not only in terms of the financial condition of the company, but also in terms of the operational quality of the building, it also has a positive effect on him. It should be noted that at the beginning of 2012, 3% of housing in Uzbekistan was included in the emergency fund. According to statistics, 30-50% of buyers of new buildings become the owners of defective houses. Of these: 18-20% of homes have significant construction errors and are uninhabitable in terms of safety and convenience, 24-25% - the cost of repairing defects and unfinished work, 48-50% - the cost of repairs for homeowners .

From an organizational point of view, calendar planning can be considered in two aspects:

1. Construction management: serves as a basis and even a priority document in the coordination of the actions of all these participants in the construction process, that is, one of the foundations of contractual relations.

2. Operational planning: planning for the formation of schedules of repair and construction works on the basis of short-term or long-term normative information or information on the condition of the object at the operating facilities, intended objectives: capital investment, forecasting of resource needs and building exposition maintaining and improving qualities.

In both cases, the calendar plans determine the sequence and interconnectedness of the repair and construction work over time in accordance with the optimal technological purpose. Depending on the combination of one or another goal or opportunity, calendar plans are the criteria for the amount of capital investment (economic criterion, sometimes the "Net Present Value", present-day cost NPV) [5], continuity of resource use (resource criterion, ITI method) [2, 8], are optimized for continuous assimilation of fronts (NOFR method), which can also be optimized for duration depending on the requirements for a uniform distribution over time of construction periods. (time criterion). Other individual or differential criteria combined into integral criteria may also be selected as constraints.

The main advantage of multi-stage planning of the modeled production process for the purpose of obtaining statistical data is the automation of calendar planning with the possibility of optimization even in the changing conditions of production. Computational planning, which has become a synthesis of computer technology and mathematical hardware, calculates the consequences of various types of management solutions adopted in the short term and draws conclusions about these solutions, as well as correcting graphs in case of deviations from the planned parameters in the short term. allows forecasting. On the whole,

It is also possible to distinguish between the Chief Builder and Plan WIZARD programs, which allow you to use the estimate-normative base and get a cost estimate of the project at the pre-project stage. The analysis of calendar planning methods revealed many aspects of the models, as well as the advantages and disadvantages of the main methods, depending on the goals and objectives. Existing software products allow you to automate the planning process in project management, but in orienting them to different goals, in the selection of software products, it is necessary to pay attention to the compliance of program capabilities with management tasks. Obviously, the changing situation on the construction site may require serious changes to such a plan, however, in any case, the content of the schedule will allow the construction manager to clearly understand what to do in the coming days, weeks. months. The purpose of the table is to develop and implement the most rational model of organization and technology of work in time and space, performed by continuous and efficient use of labor, material and technical resources allocated by different executors. commissioning of the object in due time. The object calendar table in PPR defines the sequence and timing of each type of work on a particular object from its start to launch. Typically, such a plan divided into months or days, depending on the size and complexity of the ect. The calendar plan (table) of the objects was developed by the PPR compiler, viz. a general contractor or a specialized design organization involved for this. Worksheets are the most common type of planning. As a rule, they are formed very quickly and often have a simplified form, which means that practice shows that they are not always properly optimized. However, they usually take into account the real situation on the construction site better than others because they are created by the people directly involved in the construction site. This is especially true of weather conditions, the specifics of subcontractor interactions, implies the implementation of various rationalization proposals. factors that are difficult to predict. Technological maps and hourly (minute) tables on maps work processes These maps were created by the developers. Such tables are usually well thought

out, optimized, but they only focus on normal (possibly) operating conditions. IN specific situations they may require serious correction.

No matter what the industry, with a plan, you first need to determine the scope of work: breaking down the whole process into components. In addition, the criteria may be not only technological differences, but also the number of employees, the necessary mechanisms and devices, and so on. Timelines Once everything is in sequence, you can start counting down the hours. There are norms and standards for production and construction, according to which specific deadlines are calculated for a certain amount of work. For mental labor, you cannot calculate the duration of the work according to the formula. But a manager with a lot of experience, knowledge of his employees can clearly set a deadline for solving the task. Knowing the time of each type of work, we can begin to determine the time required to complete the entire process. It should be noted that some tasks can be solved in parallel and some processes require technological breaks.

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