

Poor design and production information construction essay



**ASSIGN
BUSTER**

Take off quantities for the two manholes shown and specified on the drawing. Notes Provide a taking-off list and attach a query sheet to the front of your measurements showing details of any assumptions you have made. You are not required to square the dimensions.

MANHOLES 1

MANHOLES 2

MANHOLES 3

MANHOLES 4

MANHOLES 5

MANHOLES 6

MANHOLES 7

MANHOLES 8

QUESTION 2

Poor design and production information is often a cause of project failures in the construction industry. Identify causes of poor information and the effects that these may have during the pre- and post-tender stages of a project.

Identify methods that have been developed to overcome these problems.

Typical causes of project failure occur when a number of criteria necessary to achieve success are not met. Such criteria are on time delivery; on or under budget; and the acceptance by client based on stated scope of work.

Only a few projects achieve all three criteria. Many more are delivered which fail on one or more of the above mentioned criteria, and a substantial number fail badly enough that they are cancelled. Projects often fail because of either poor planning, lack of leadership, inadequate knowledge, people

problems, or lifecycle problems. Poor planning can include lack of communication, not breaking down development into phases or steps, not prioritizing operational activities, objectives, not obtaining stakeholder approval, no business plan or inadequate business plan. They can also be caused due to unrealistic expectations set, such as financial investment, time required, and set-up costs. Inadequate capital or poor use of capital, lack of time commitment, and unrealistic scheduling, could also be lead to project failure. Meanwhile as mentioned above a project could fail due to lack of leadership such as not defining ownership or the leadership structure or not identifying decision makers, not making decisions timely or decisively, not having a strategic vision and holding unrealistic expectations of others. Inadequate knowledge can include lacking skills and a proven approach to project management, not estimating, monitoring, or controlling expenditures, or having an incomplete or vague project work plan. Other factors are people and lifecycle problems. The former could be lacking leadership, lacking effective project team integration between clients, the supplier team, and the supply chain or by not having adequate resources due to under/over estimation of work. Meanwhile the latter could be resulted by failing to clearly and completely define the requirements, resulting in building the wrong features or gaps in the features needed. Other factors could be using a poor technical design that does not allow for modification or is not scalable or changing requirements late in the project and continuing change requests which cause the project to drift. With reference to pre it can be argued that if information was missing from the pre-tender documents, this will result in incorrectly priced bills of quantities, delays to tender period awaiting missing information and client contract sum available could be

<https://assignbuster.com/poor-design-and-production-information-construction-essay/>

incorrect. Meanwhile at post tender stage missing information could give rise to problems agreeing variations, possible problems settling final accounts and most probable could give rise to contractual disputes. As mentioned previously, inaccurate estimates at post tender stage can lead to a lot of variations, delays, conflicts and tension between team members. Site meetings not correctly minuted could also be a problem onsite at post tender stage. Such issue can result in misleading information and waste of time and resources, eventually causing delays for the completion date. Conflict and personal matters within the building teams lead to no coordination between members, and will eventually create problems on site such as logistic problems when dealing with contractors at post tender stage. At post tender stage, when variations or extra works are included in the contract measured bill of quantities and not listed separately at the end, backed up by site instructions given by the managers, then it would be difficult for the client or his representatives to approve such works. It is thus clear that the brief and its interpretation, effective schedule and control, together with continued client involvement are at the highest levels for any project's success. It is also ideal to always plan a backup to the original plan, that is contingency planning. Contingency planning is a way of allowing for adverse changes and generally means making monetary allowance for items beyond control. bThe pre-tender stage is everything that happens up to the point where the tender is issued to contractors for pricing. This begins with the client's first decision to consider constructing a building, through the various stages of the design development to the preparation of tender documents. The RIBA Outline Plan of Work divides the pre-tender works into seven stages from Appraisal to Tender Document. Except in very unusual circumstances, the contractor is

<https://assignbuster.com/poor-design-and-production-information-construction-essay/>

not involved pre-tender. The RIBA Plan of Work describes the activities from appraising the client's requirements through to post construction. The stages are also used in the appointment of architects and help to identify consultant services and indicate the resource and fee total by Work Stage. The choice of procurement route has a fundamental influence on how different Work Stages proceed. This is summarised in outline as far as possible but the exact way in which different Stages are conducted within the overall project programme needs careful consideration at the outset. It is worth noting that the RIBA Plan of Work was originally developed to reflect the needs of Traditional contract forms. The subsequent development of alternative contract forms means that RIBA Stages don't necessarily fit precisely with discrete stages in these alternative contract forms. Also, for a project that wants to integrate sustainability in all its aspects this is even more important, as for many clients it will involve some changes to conventional methods and new ways of working need strong management support if they are to be successfully implemented. The Outline Plan of Work organises the process of managing, and designing building projects and administering building contracts into a number of key Work Stages. As mentioned, the sequence or content of Work Stages may vary or they may overlap to suit the procurement method. The diagrams illustrate different sequences for completion of work stages for various procurement methods, but are not representative of time. In arriving at an acceptable timescale the choice of procurement method may be as relevant as other more obvious factors such as the amount of work to be done, the client's tendering requirements, risks associated with third party approvals or funding etc. The process of planning, designing, financing, constructing and operating physical facilities have a <https://assignbuster.com/poor-design-and-production-information-construction-essay/>

different perspective on project management for construction. Specialized knowledge can be very beneficial, particularly in large and complicated projects, since experts in various specialties can provide valuable services. The Royal Institute of British Architects is the UK body for architecture and the architectural profession. This provides support for over 40, 500 members worldwide in the form of training, technical services, publications and events, and set standards for the education of architects, both in the UK and overseas. The RIBA Plan of Work describes the activities from appraising the client's requirements through to post construction. The stages are also used in the appointment of architects and help to identify consultant services and indicate the resource and fee total by Work Stage. Thus, the RIBA Plan of Work organises the process of managing and designing building projects and administering building contracts into a number of key Work Stages activities from appraising a clients needs through to post construction. Five stages of Preparation, Design, Pre-Construction, Construction and Use, make up the Plan of Work. The ' Briefing stage' refers to the inception of the project and the feasibility study. A general outline of the requirements is prepared and the general action is planned. Client organization is set up for briefing and requirements are considered with interested parties. An architect is also appointed for the professional support. The feasibility study is necessary to provide the client with an appraisal and recommendation in order that he may determine the form in which the project id to proceed, ensuring that it is feasible; functionally, technically and financially. Studies for user requirements, site conditions, planning, design and cost are carried out as necessary to reach decisions. This stage will involve meetings, interviews and discussions, site visit, inspections and surveys. Within this stage specific

<https://assignbuster.com/poor-design-and-production-information-construction-essay/>

tasks such as development of brief and site studies take place. The second stage refers to the ' Plan Stage'. General approach to layout, design and construction is determined in order to obtain authoritative approval of the client on the outline proposals and accompanying report. The brief is developed further. Studies are carried out on user requirements, technical problems, planning, design and costs are carried out as necessary to reach decisions. Meanwhile the brief is completed and decisions on particular proposals, including planning arrangement, appearance, constructional method, outline specification and costs are taken and approvals obtained. Once that the brief is completely developed, the architects prepare their full designs, engineers their preliminary designs and a full explanatory cost plan is prepared. During the third stage, ' Working Drawing Stage', final decisions on every matter relating to design are specification, construction and cost are obtained. Every part and every component of the building is designed with the help of all concerned. A complete cost check on design is carried out. Production information is prepared, making final detailed decisions on how to carry out the work and final drawings, schedules and specifications are prepared. All information and arrangements are prepared and completed by the preparation of bills of quantities and tender documents. The Bills of Quantity provide a list of items of work which are briefly described. The bills also provide a measure of the extent of works and this allows the same works to be priced. The work included in the item is defined in detail by rules in the Method of Measurement employed for the particular case. The item description is therefore shorthand to allow the relevant rules of the Method identified. Afterwards, a call for tender is made by either general tendering or selective tendering, and identification and evaluation of potential

<https://assignbuster.com/poor-design-and-production-information-construction-essay/>

contractors and or specialists for the construction of the Project is made. At the ' Site Operation Stage', work can start on site and it consists of three separate stages. These are project planning, operations on site and completion. Detailed planning of the project is carried out with the contractor including the nomination of sub-contractors, then the building contraction is carried out by the contractor and over a stipulated timeframe the building is completed and commissioned. Last stage would be that of the ' Feedback'. The management construction and performance of the project are analysed. The completed building is inspected and studies of it in use are made.