

# Managing Your Engineering Consultant

Port and harbor districts have substantial investments in their capital assets. These capital assets are in challenging environments. They are either continually assaulted by wind, waves and weather; or owners find that they need to be updated to meet the latest user needs. Every port and harbor district has a team that helps them optimize their Capital Investment. That team usually includes an engineer as well as many of the biological sciences there are so essential to permitting waterside projects today. These relationships are both successful and unsuccessful. Those owners with successful relationships seem to have a knack for finding the right consultant. 10 years of contractor experience, 15 years of owner experience and some 15 years of consulting experience suggest that there might be some common threads in those relationships that are successful. Here are a few thoughts.



Successful owners grasp that no one understands their business as well as they do. They do not expect their consultants to appreciate the nuances of their particular location or operational needs. They place themselves in a role in which they are expert and share that with the consultant. Good consultants have an appreciation of the broad challenges that face port and harbor districts. But they bring a different set of skills to the table; those of providing solid, well founded and engineered designs.

Owners who report successful relationships with consultants indicate that they spend an extraordinary amount of time preparing for a new project. They understand that good engineers are not cheap. These owners assess their operational needs and generate extensive laundry lists of what their particular situation requires. When the consultants are selected they have done their homework, they know what the successful operational components of the improvements must be.

Satisfied owners also report that they remain open to new ideas. They understand that engineering consultants often work in a variety of different settings. The consultant can bring ideas from other projects. This cross pollination often yields solutions that might not have been on the owner's original menu.

An effective procurement strategy is also important to ensuring that the relationship between a port district and its engineering consultant is successful. In a public environment this allows port and harbor districts to choose from limited lists. This is often controlled by district or state procurement guidelines and varies from place to place. Also, this usually applies in all but the smallest projects where they might simply select a desired entity. Port owners report that they ask not only for firm qualifications but also of the individuals who will be working on their projects. They ask to meet with the engineers who will be doing the actual design.



Engineers are expected to demonstrate their knowledge of the kind of work that is being anticipated. They should also be able to demonstrate their quality control methodologies to ensure that only first class quality work is produced. Consulting firms, like all businesses change over time. Sometimes they improve and sometimes they don't. Owners often report that they are skeptical about engaging firms that are involved in lawsuits until the lawsuit matters are fully resolved and the outcomes known.

Once the statements of qualifications are reviewed, owners negotiate the best fee for services. Successful owners realize that the lowest initial fee is seldom the lowest fee at the end of the project. Decisions made by consulting engineers leverage themselves 100 to 1, or more in terms of the cost of a specific design task and end cost of the constructed work. Clearly owners need to be price sensitive. They need to ensure that they are getting value for dollar spent. Good consultants also realize this. They will suggest good fees and will help the owner defend fee decisions. Effective contracts between engineering consultants and their owners have a reasonable proration of risk. They do not ask the engineer to take on a disproportionate amount of the risk.



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Once the engineering consultant is engaged good owners report that they spend as much time as is necessary to ensure that the engineering consultant is up to speed with their operational program and their needs. At this point engineers are expected to bring their top talents to the game. Owners also report that they expect the engineers develop schedules of work products as well as budgets. It is a critical device to ensure that the work of the engineer can be tracked. Periodic review of the engineer's work product is essential to ensuring that the work is proceeding to the desired end game. It also allows for midcourse corrections if necessary.

The design  
nothing there  
changed. It is  
needs to  
schedules. It  
work for its



process is a process of change. Where there was  
will now be something; or something will be  
not a production process but a creative process that  
accommodate some contingencies in budget and  
makes no sense to design something that will not  
intended purpose.

Those  
evolved from  
preparing for an engineering consultant. They include an effective procurement process that allows for a full review of the proposed consultant. There is a clear understanding of the expectations. Budgets and schedules are reasonable and mutually accepted. One sided deals never seem to work out. Either the owner is disappointed or the engineer is unable to give its best effort. A recognition of the reasonable mutual business needs of both entities result in a relationship that will be renewed in subsequent projects.

relationships that are successful seem to have  
owners who spend as much time as necessary

If you have any suggestions, questions or comments feel free to contact me:

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