The 8 Critical Questions to Ask Before Hiring an Engineering Firm

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Hiring the engineering firm that is best suited to meet your needs is critical to the outcome of any project, regardless of size or scope. If you're currently in the market for an engineering firm it's very important that you complete some preliminary research in order to ensure you're selecting a qualified firm with the experience and resources necessary to complete your project successfully.

Each of the engineering firm you're considering likely has at least one area of expertise and a host of resources which can be used to execute your project. Though each firm will likely have a list of impressive qualifications and a staff of talented individuals, it's important to take a closer look at each before making a final decision. Be sure to ask questions, complete some research on your own and consider how your findings will affect your project. By taking the following eight points into consideration you'll be prepared to do just that, and most importantly you'll be prepared to efficiently narrow down your options and select the firm that is best suited to complete your project.

Scope of Work (SOW)

The firms you're considering should be prepared to offer a detailed scope or statement of work, also known as an SOW. This document is designed to outline the scope of the entire project including: timeline, project plans, specs, pricing and any other relevant details. Be sure to review the SOWs provided by each firm closely. The details and information provided will not only reveal each firm's plans it will help you determine which firms are truly prepared to complete your project. You may be surprised to find oversights and inconsistency in some of the SOWs with which you are presented, you are also likely to find some impressive details and innovative solutions in others.

Once you have reviewed each statement of work you should already be prepared to narrow your options relatively significantly.

Schedule and Pricing

The scheduling and pricing of your project should both be deciding factors in your research process. Timing is something that many businesses and consumers over look or fail to discuss in depth before beginning a project. While there are often unforeseen developments in any project, the project plan should allow time for some of these and continue to remain on schedule. Be sure to discuss any issues with scheduling and timing that are typical with projects similar to your own. This is the best way to avoid surprises and prepare yourself, as well as all other interested parties, should there be timing issues during the project.

Be sure to discuss current and future workloads with each firm as well. The amount of workload a firm is juggling is often indicative of their success but can also prove to be a hindrance when unforeseen issues arise with yours or other projects. Because this can have a

major impact on the timing of your project it's critical to ensure that any of the firms you are considering have the adequate resources to devote to your project.

Pricing will undoubtedly play a major role in your decision making process. While it's important to keep your budget in mind while selecting a firm and planning your project, choosing the least expensive option is not always the best approach. Be sure to review the pricing provided by each firm carefully. You may find that the least expensive bid does not account for certain expenses or perhaps it does not allow excess budget for unforeseen costs.

When reviewing proposed schedules and pricing, don't be afraid to ask questions and be sure to compare each plan side by side. This is the best way to identify the shortcomings in some of the project plans as well as the strong points in others.

Qualifications, Insurance and License

Be sure to ask each firm to provide licensing information on all of the engineers that will be working on your project. Many consumers simply assume the staff of an engineering firm is in fact qualified which can be a gross generalization. Asking for this documentation is the best way to protect yourself as well as the integrity of your project.

It is also important to ask for information about the firm's insurance coverage. Not only do you want to ensure that they carry coverage for injuries or accidents, you want to ensure they carry errors and omissions insurance. Also known as Engineering Professional Liability insurance, errors and omissions provides coverage in the event that an issue arises with a project and damages must be paid to the customer. Confirming that each potential firm does in fact carry Engineering Professional Liability insurance is the best way to protect yourself and the investment you are making in your project. Any of the firms you're considering that cannot provide documentation to prove both licensing and insurance should immediately be eliminated from your list of candidates.

Experience with Similar Projects

Most firms will be prepared to show you an impressive portfolio of their best work, which is oftentimes large scale and high budget. While you may be very impressed by their work it's important to ask yourself how it relates to the project you're looking to complete.

If any the firms do in fact present portfolios with projects similar to your own this should be considered a positive indication of their work history. If the portfolios with which you're presented don't speak directly to your project, be sure to ask for specific examples of work on projects similar to your own. Most firms will be happy to accommodate this request. If you are in a relatively narrow field, you might need to settle for experience that is close, but not exactly same.

Location and Proximity

Location and proximity are also very important factors to consider. As you narrow down your choices keep in mind that you will likely be meeting with the firm you select regularly. You want to be sure to select a firm that you will be meeting with in a location relatively close to your home and/or office. While the firms you are considering may not be headquartered within close proximity be sure the engineers and staff you will need to see are easily accessible. This is particularly important because regular meetings and communications will be essential to the success of your project. If you choose to work with a firm that is not proximate, then inquire about their use of web conferencing and similar tools that help to bridge the distance. Distance should not be an impediment if dealt with using modern technology, but should be anticipated.

Use of current software and analytical tools

Be sure to ask each potential firm what type of software and analytics tools they use. You will want to hire a firm that is using cutting edge technology to execute their projects. In order to determine if they are in fact using the most current software available you will likely need to do some research on your own. Find out which software suite or suites are considered to be the frontrunners at the moment. Simply asking if each firm is using current software is not enough; ask for the specific names of any software that will be utilized in your project.

If applicable you will also want to ensure their software tools are compatible with and CADD or FEA software you may use.

Analytics will also play a vital role in the success of your project. Be sure to ask each firm which analytics tools they will be using and again do some research to determine if they are in fact the most current available. These tools will like play an important role in your project so it's important to partner with a firm that has invested in cutting edge analytics technology.

Network of resources they can reach out to as needed.

Hiring a reputable engineering firm not only provides the peace of mind that you are working with a team of highly skilled and qualified individuals, it should also give you access to a large network of resources. From information to materials, the majority of engineering firms have access to a vast network of resources which can be utilized during the planning and execution of your project.

Be sure to ask each firm what kinds of resources they have access to and how they will be using them to improve the outcome of your project. This should be a very important part of your research process. Most reputable firms will have these resources and it's simply a matter of which ones are willing to pass these benefits to their clients. The firm you select should be prepared to share this information with you include it in the overall project plan.

Reputation and references.

Finally, researching the firms' reputations and asking for references is very important. Any experienced firm should be able to provide dozens of references. Be sure to ask for references from clients with whom they have worked on projects similar to your own. If you're working on a project that involves solar technologies for example, you should not contact references from a semiconductor equipment project, and vice versa. Be sure to ask each reference for specifics: what they liked about working with that firm, what they did not, etc. Though the reference may have been pleased with the outcome of their project, they may be able to give you some insights that steer you in another direction in terms of the firm you ultimately decide to hire.

Furthermore complete some research on your own. Check for customer feedback and company news online and perhaps ask friends or colleagues if they have experience working with the firm(s) you are considering. Company references are always good but the firm's reputation in the community is oftentimes even more indicative of their quality of work. The information you find during this process may be very revealing and will likely help you to eliminate a few of your remaining candidates.

Hiring an Engineering Firm

The cost associated with hiring an engineering firm is generally significant, which is precisely why it's so important to research and ask the right questions before hiring a firm.

By taking all eight of these key factors into consideration, you will be prepared to hire a firm that is highly qualified and prepared to complete your project. Not only will you have the peace of mind that you have selected a firm with an SOW, schedule and pricing model with which you are comfortable, you will be able to rest assured that the firm's reputation and portfolio make them qualified to execute your project successfully. So go ahead, begin your research today and before you know it you'll be confidently hiring the ideal firm for the project at hand.

About Glew Engineering

Glew Engineering Consulting is a highly respected full service engineering firm serving clients worldwide, across a host of industries. Our highly skilled staff of engineers, scientists, and consultants provides innovative, individualized solutions for each and every project. From mechanical and solar engineering to business development, our versatile team of engineers boasts an unrivaled level of knowledge and expertise. If you're currently in the market for an engineering firm, look to the experts at Glew Engineering Consulting. Contact us today.