Out-of-State and Overseas Projects

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The recent economic recession forced most architectural firms to reduce the number of their employees. Large national firms with a headquarters-office/satellite-offices structure had a distinctive pattern of staff reduction, maintaining the size of the main office and dramatically shrinking the satellite offices. In many cases, only a few experienced architects remained in the local offices. Many of these firms preferred having all significant design work performed in the main office to ensure a uniform firmwide design brand.

The recession also led many firms, for their survival, to explore the international market. For example, China, then the world's second largest economy, attracted many U.S. firms to venture into international practice. However, providing architectural services remotely, to another country or even to another state, can be challenging. How do we ensure design quality and be profitable in these situations?

Out-of-State Projects

Let's first look at firms with a main "design/headquarters" office that depends on local satellite offices to document projects and perform contract administration. In this case, the headquarters office completes schematic design and design development, and the local office completes the construction documents and leads the permitting process and the construction phase. This type of work flow has several potential challenges. First, poor coordination between the design team and the architect responsible for construction documents and CA can result in design compromises and loss of profits.

Second, the design office may be unaware of important local code requirements. For example, a design office in, say, Illinois may not be familiar with California's stringent Green Building Code. The Illinois design team could design a stunning, all-glass building, only to be told by the local architects that the building doesn't provide the energy performance needed to comply with California's code. Although the designers and the local architects are employed by the same company, the local architect is often not involved during the critical early design phases. This siloed design process can result in inefficient work efforts and can seriously affect the intended design quality. After the design reaches the architect's desk in California, the building has to be redesigned, which usually leads to schedule delay, financial loss, a diminished design, and, most likely, an unhappy client.

Third, the design office may lack knowledge of local materials and building processes. Many materials specified by the design office may not be readily available locally, resulting in more effort by the local architects and unnecessary substitutions during construction. A real life example: the design team in the Texas main office sized the elevator shaft per the manufacturer recommendations provided by the local Texas representative. The project was then shipped to the California office towards the end of the Design Development phase for documentation. However, the elevator manufacturer representative in California recommends a larger shaft size due to the larger guide rail bracket required per the California seismic code (Zone 4). The size of the adjacent rooms had to be adjusted, which affected the furniture layout, the shaft had to be remodeled, the structural engineer complained that they have to move the beams, etc.

Close coordination as early as possible between the local architects and the remote design team is the key to successful out-of-state projects. This includes the involvement of local consultants in the early design process. In the above example, the California-based mechanical engineer /energy consultant could have easily flagged the potential problem before valuable time was spent designing a non-code-compliant, all-glass building. All of the above is also true when a design office engages a local architectural firm for documentation and contract administration. Close coordination between the design architects and the local Architect of Record in the early design phases will eliminate many unnecessary problems down the road.

International Projects

There are many reasons for U.S. architectural firms to conduct business overseas. Overseas projects provide not only great design flexibility but also huge financial incentives, and many firms in the U.S. expanded their international practices during the recession. Even more often than with out-of-state projects, U.S. firms are typically hired as the Design Architect for the concept design, schematic design, and design development. The overseas Architect of Record then uses the design package to produce construction document for bidding (or tender) and construction. In many cases, the Design Architect has no contractual scope to participate in the documentation and construction

phases. Because the designers are not involved in these phases, design changes due to local codes, materials, or construction processes are often made without the design team's knowledge. These changes could affect the building's aesthetic quality. In China, for example, the problem is amplified on small tenant improvements projects, which don't require the involvement of local architects. The design development documents are often used for construction. Another problem with overseas work is that, due to budget constraints, small projects are built by local contractors who are not familiar with the construction means and methods typically used in the U.S. For example, on a small project our firm recently finished in Macau, China, the local contractor was not familiar with gypsum board construction. All of the interior non-load-bearing walls ended up being constructed with unreinforced bricks finished with painted plaster.

In many cases, the fees required for these reviews are higher than the combined SD and DD fees. Therefore, it is essential to educate your international client about the need for such services. Otherwise, either the design will be compromised during construction or the design firm will suffer a financial loss. As a small firm conducting business overseas, we've learned this lesson the hard way. Since our project in Macau was a fast-tracked (of course it was; everything in China is fast-tracked), and to ensure the design quality of the finished building, we video-conferenced daily with the local contractor and the owner to select materials and make sure what they built aligned with the design intent. Due to the time differences, we ended up working overtime almost every day during the duration of the project. Although the project was eventually built successfully and the owner was satisfied, we compromised on many design decisions and our firm suffered a financial loss. The problem would have been minimized if the local contractor had been involved early in the process and if we had been given enough fee to support our construction phase activities.

Lessons Learned

There are ways to ensure design quality and be profitable at the same time. For out-of-state projects, the key is to have the local architect (or office) and consultants be involved from the start of the design process. The time spent by the local architect in the early phases is well justified. The local architect often has a better understanding of the site and local climate and would be able to contribute insight on some aspects of the design, such as building orientation and material selections. Such coordination efforts eliminate many unnecessary changes down the road. Also, having a good understanding of the project from the beginning helps the local architect in performing construction contract administration.

International projects are a bit trickier. To ensure that the finished building reflects the design intent, it's common nowadays for U.S. design firms to propose fees for reviewing submittals and making document revisions during construction. The question is, how much review (and fee) is enough? The local architect (in China, for example, the Local Design Institute) is often not selected until the design is completed. In such cases, budgeting adequate fees to support activities during the construction phase becomes essential. Firms conducting business overseas need to take time zone differences and traveling time into account. Miscellaneous costs for interpreters or translators (for RFIs and submittals) could also drive up the fees. The contractor-selection process becomes crucial, especially for small projects. Many international clients are willing to go the extra mile (by hiring foreign designers) to have better quality projects. However, it is still our job to remind them how important it is to NOT select contractors solely based on their bid price. As foreign designers, we should not design without regard for local conditions. A basic understanding of the local codes and construction materials and methods is essential. This minimizes the number of changes necessary by the local architect, which in turn reduces the overall design impact during the documentation and construction phases.