

WHITEPAPER



ATCE **AT RISK PROJECT DELIVERY**

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ATCE At Risk Project Delivery



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Over the past 10 years the Alfa Tech Consulting Enterprises (ATCE) has been actively involved in the development and execution of what has become a highly successful project delivery model. This model is referred to as the Turnkey or Full Responsibility Model.

ATCE originally developed its business around “consulting design” services. Its Principals have always been well aware of what we refer to as the “communication” challenge that has existed in the US, especially on high technology type projects. This challenge has existed in the classically utilized project delivery methods including design-bid-build, design-build and guaranteed maximum price (GMP) to name a few. The project delivery methods typically utilized in the US have left many Owners with a bitter taste that typically were derived from their frustration with the inability of the design and construction vendors to deliver projects on schedule and within budget.

ATCE began a program in 1997 with one of its key clients to perfect a delivery which would eliminate the lack of predictability in project delivery. Over this time period ATCE and Lockheed worked to perfect a model that has been classically used for many decades in Asia and Europe. The methodology perfected has proven itself in the delivery of over 100 projects ranging in size from a few hundred thousand to over \$100 million per project. Over the past 5 years we have applied this same model to other client sectors including Biotechnology, Software Developers, Electronics and Semiconductor clients. ATCE is proud to state that all projects have been successfully delivered with NO CHANGE ORDERS and ON SCHEDULE. These projects have ranged in size from a few million to over \$90 million.

Sample Turnkey Projects



FACET BIOTECH
Redwood City, CA



GILEAD SCIENCES
Foster City, CA



LOCKHEED MARTIN
Sunnyvale, CA



SEAGATE
San Jose and Milpitas, CA



CREDENCE SYSTEMS
Hillsborough and Milpitas, CA

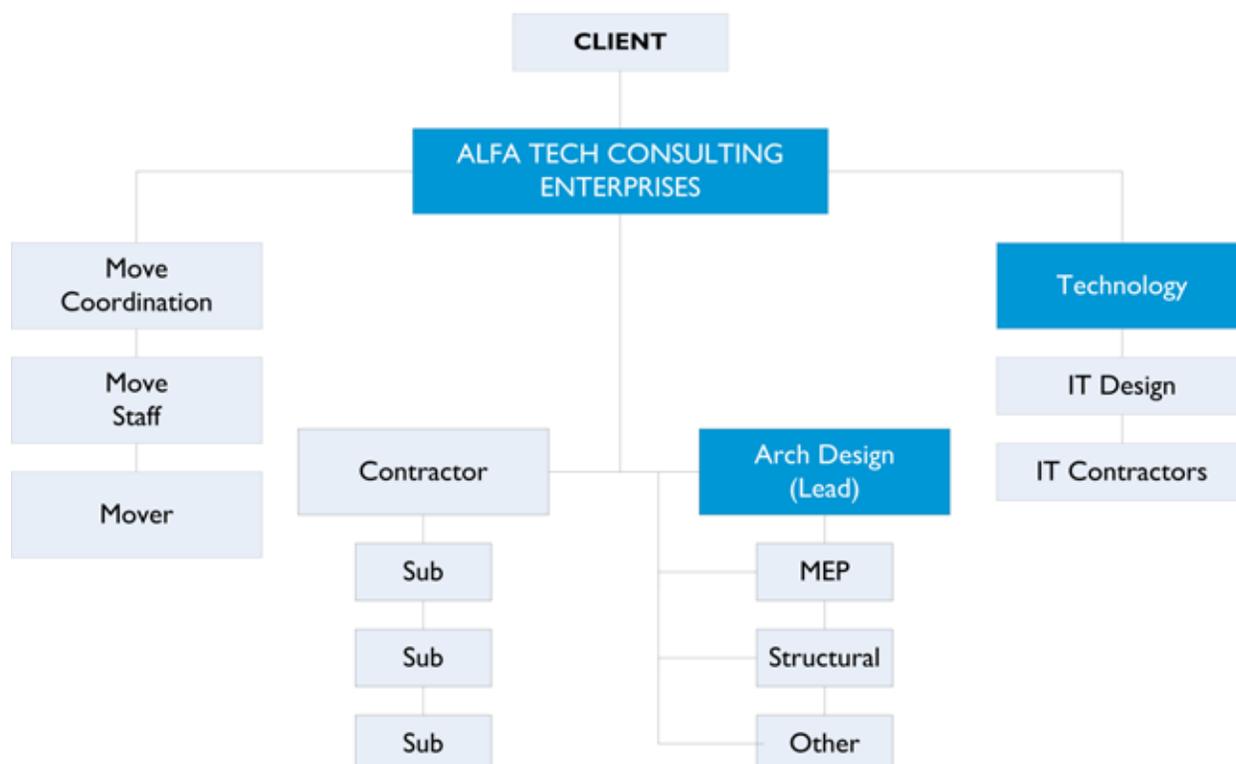
ATCE *At Risk* Project Delivery

The Full Responsibility / Turnkey Model (shown below) success is rooted in its focus on improving the communication of a project's scope of work between Owner, designer, and contractor. With years of experience as a design consultant ATCE constantly was, in effect, the bridge between the Owner and the contractor in terms of defining a project. The simple fact is that is virtually impossible to document every element of a project's definition on paper. This is the principal cause of change orders and/or delays on projects historically. Secondly there is often a triangle set up contractually between Owner,

designer and contractor. This is the secondary cause of change orders. All too often when the Owner controls the contracts even a slight nod of the head from an Owner results in contractor perception that a change has been approved. The latter is the source of most legal claims on projects in the US.

ATCE believes strongly that these negative experiences have been virtually eliminated while utilizing the Turnkey model. The projects referenced above have been accomplished with zero change orders, maintenance of original Owner budgets and schedules.

FULL RESPONSIBILITY PROJECT MODEL



ATCE *At Risk Project Delivery*

Some of the fundamental principals of this approach are:

1. Meticulous control of the project, which includes Owner and its internal Users, during the design process. This control is paramount during the “project definition” early stages.
2. Communication of the project scope to field team during the design process. This virtually eliminates the change orders which result from the design bid build approaches.
3. Assurance that competitive pricing is utilized at all stages of project development from inception to commissioning and startup.

In summary the Turnkey model is executed by ATCE with the meticulous management of the project definition and design process. ATCE has in house Project and Construction Management personnel that are expert in both the design and construction of a wide variety of projects. ATCE is unique in that it also has in house, experienced personnel in the design of Mechanical, Electrical, Process Piping, and Technology design, as well as specialized commissioning and startup expertise.

The Turnkey model does not dictate that we use our in house personnel in the design but, as a minimum, they are available to our PM/CM personnel to act in, as a minimum, a review mode. This ensures that neither Owner, designer or contractor has a inordinate weight in decisions that affect the project’s budget, schedule or quality.

In the Turnkey process the Owner still receives the benefit of the competitive bid environment. ATCE typically will send out RFP’s early on in the project for Architect and other design professionals, including MEP when requested by the Owner. During the design development process ATCE will also send out and RFP for a General Contractor (GC). The GC will be selected based on team, rates and pre-construction services capabilities. During design development the GC will provide independent looks at both schedule and budget. These are constantly compared with ATCE in house developed schedules and budgets. Cost benefit sessions during this phase with the Owner are the first step in terms of project control.

Once design is substantially along and associated budgets and schedules are approved by the Owner, the subcontractor bid process begins. Competitive bids are solicited from key subcontractors. After selection of key subs we convene scope of work review meeting while design is progressing toward the final Permit Set of construction documents. This period is critical with respect to getting both design team and contractors “on the same page”.

It is important to emphasize the need for these steps as briefly outlined above. The execution of this approach has proven successful, without exception. The fact is that on all of the projects wherein this model has been utilized there have been ZERO CHANGE ORDERS. The proof is in the stated satisfaction of our Owner clients in the sectors and projects mentioned above.



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