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Achieving Collaborative 'IPD-ish' Delivery with basic D-B, P3 or CM contracts: Yes, there is a way…

Questions from the Webinar + Answers

How does the GC figure their fees? I know Architects usually try to get a percentage fee for the total cost.

In a Qualifications-Based Selection/ open-books project, the Construction Manager's "fee" is typically proposed/negotiated in two parts: 1) a fee for design phase collaboration, expressed as a single lump sum or an hourly rate not-to-exceed an upper limit, and 2) a fee for construction phase management (for all off-site main office overhead costs and profit), expressed as a fixed percentage of the Guaranteed Maximum Price—note: on-site personnel costs, e.g., superintendent salary, equipment rentals, etc. are job-chargeable at-cost per a negotiated General Conditions Reimbursable Expenses list.

*__How would you apply IPD-ish concepts to "Project Controls" as understood in the construction industry?__

If, by "project controls" you mean the functions typically detailed in front end specifications Divisions 0 and 1, then these IPD-ish concepts provide far greater team- management tools than just shifting of risks (and control) to the General Contractor. Qualifications-Based Selection, professional fees and financial transparency within the GMP all give the Owner and Architect a much greater basis for cost/benefit decision making than old adversarial methods ever did.

*__What I have seen in construction is that the GC charges usually 15% profit and 10% OH??__

Hard-bid lump-sum projects typically experience mark-ups for change orders, expressed as OH & P percentages charged by the contractor and/or marked-up on charges made by subcontractors. However, in a Qualifications-Based Selection/ open-books project, the Construction Manager's "fee" is typically proposed/negotiated in two parts: 1) a fee for design phase collaboration, expressed as a single lump sum or an hourly rate not-to-exceed an upper limit, and 2) a fee for construction phase management (for all off-site main office overhead costs and profit), expressed as a fixed percentage of the Guaranteed Maximum Price—note: on-site personnel costs, e.g., superintendent salary, equipment rentals, etc. are job-chargeable at-cost per a negotiated General Conditions Reimbursable Expenses list.

Any change orders that clearly add scope and increase the GMP amount are eligible for additional fee, but then only at the same percentage as the original construction phase fee (not separate OH & P markups). Any change orders to subcontractors that are not overall scope increases to the GMP are paid from the Contingency funds that are included in the GMP, so the CM's fee is already applied. There is no additional 'fee' for the construction manager on expenditures from the Contingency.

**Questions and comments with an asterisk were not able to be answered during the time of the webinar Q&A period.*

Open Books with the GC appears to be the hardest thing to get them to do than anything else of the five! How do you get them to do such a thing that they have always keep real secret. I mean Real Secret! This appears to be hard to do?

"Open-books" needs to be defined in the RFP as well as incorporated in the construction contract itself. Since open-book sharing of sub bids, subcontracts and invoices with the Owner and Architect is a binding and enforceable requirement of the Contract for Construction. It is not optional—not sharing such information is a breach of contract. Open-books should not be 'hard', it is just straight forward Contract Administration.

***When is this more appropriate - size of project and/or building type?**

Collaborative IPD-ish QBS, fee-based, open-book, early GMP contracts are not limited to any particular size or type of building. All that is required is an enlightened Owner, a cooperative, professional team mindset by designer and builder, and consistent execution of mutual goals.

What family of AIA contract docs would be appropriate for the IPS-ish?

The five basic 'IPD-ish' provisions discussed in the webinar can be added/applied to any AIA contracts: especially the A133 for CM at-Risk and the A141 for Design-Build. The key is to consistently incorporate QBS selection, fee-based, open-book transparency, and early GMP collaboration in construction contracts (not closed books or lump sum construction pricing).

***Does shared technology extend beyond BIM? What about schedules, correspondence, messaging, or emails?**

The BIM 3D model itself can also include 4D time/logistics and 5D cost applications and extend into off-site prefabrication of system components. Electronic Project Management Information Systems (PMIS) enable shared communications and document management accessible by the entire team, along with a cloud-based project website for e-mails, construction submittals and closeout/as-builts, O&M manuals, etc. to facilitate maintenance and management for the life of the facility.

LEAN construction principles can also be applied to the design process. It just requires a team mentality, financial transparency and shared objectives.

What is your experience in using IPD on different building types, and on different scale projects? Does it work better with some project types?

My firm has successfully used all of the five IPD-ish techniques (or sometimes just some or most of them, depending on how flexible our clients' policies are) on projects ranging from $1M to $200M for Owners public, private and institutional. Full IPD with its shared ownership and shared risks often has a big administrative burden, too, making it hard to use it for smaller projects. But there is nothing specific to size, type or dollar amount in being eligible for collaborative IPD-ish techniques to obtain professional results. It just requires team thinking and mutual understanding.

How much education have you had to do with owners on this project delivery method?

Obviously, Collaborative IPD-ish provisions become easier to include the more flexible the client's own contracting policies are, so it is most important to help clients understand that they are the one who is paying for everything, so they should be seeing and getting all that they pay for. They should expect to get involved in making cost/benefit decisions and get the benefit of efficiencies and savings, but not expect to win the construction lottery or get something-for-nothing. Yes, adversarial old established policies can be very hard to change, but the payoff for a successful project is great when the light bulb finally goes on above a client's head…

Non-Questions also addressed:

***Comment: There's still a lot of value in D/B bridging model. In pure D/B, a lot of the C/A services that typically were provided by the architect in other delivery methods no longer are there. There's often a barrier erected by the contractor between the architect and owner in D/B. The bridging architect now provides many of these CA services on behalf of the owner- submittal reviews, pay apps, etc.**

The single biggest thing that the building Owner, and the Architect and consulting engineers need to know before participating in Contractor-led Design Build is this: In D-B project delivery, the General Contractor—NOT the Owner—is the only 'client' to whom loyalty and professional services are owed by the GC's Architect. A design subcontractor in D-B must represent the interests of the General Contractor, whose typical lump-sum financial interests are exactly opposite to the financial interests of the Owner. Subcontractors cannot even interact with the Owner without GC permission, and cannot hold their employer, the GC, responsible for contract compliance on behalf of the Owner. The Owner is a sales 'customer' who purchases design as a re-sold commodity within the GC's overall building product, not as a 'client' who receives devoted professional services from the Architect.

Design-Build can be successful, though, as long as its contract terms are fair and transparent with aligned financial incentives. Fairness begins by the Owner selecting the D-B team based on Qualifications, not by asking design firms to give away unpaid design at the architect's risk prior to selection (i.e., unpaid design competitions in exploitative Bridging). However, a D-B construction contract that requires fully open-books on a cost-plus-management-fee basis eliminates traditional lump-sum hidden profit mark-ups and allows the Owner to see everything they are paying for. Setting an early Guaranteed Maximum Price and a negotiated cooperatively-managed Contingency fund keeps the project within the original budget. These D-B techniques can achieve teamwork among all parties,

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remove adversarial friction losses and prevent incentives for inflated change orders. The most important starting point for any form of Design Build is that it is absolutely imperative for everyone involved to fully understand their roles and responsibilities, and then execute a fair, fee-based, open-book GMP contact. Otherwise, choose a different delivery method that can meet everyone's needs and expectations.

***Comment: The self-perform requirement for contractors often is the result of lobbying and requirements writing by the local construction industry. By requiring a certain percent of work to be self-performed, it effectively limits that work to local contractors, who have in house crews, vs. allowing an out of town contractor from coming in, winning a project and subcontracting the entire job. Locally in Arizona, horizontal work has percentage of work as high as 40% to 50%. That limits horizontal work to locally based contractors.**

The requirement for any Building Contractor to self-perform some arbitrary portion of the overall work is very difficult to justify in any rational way. Self-performing opens the door to self-benefit and inevitable conflict of interest profit motives, even in the best of circumstances with the best of intentions. Generations ago, Contractors did all or nearly all of the work in-house, with their own staff of carpenters, masons, electricians, etc. But as construction became ever more complex and specialized, so did subcontracting. 'Horizontal' (i.e., infrastructure) construction is still where most self-performed work occurs, and its days in 'vertical' building construction would seem to be drawing to a close.

***Comment: No LD's??? Frankly, this eliminates a lot of the incentive to complete on time. Yes, it's not great, but otherwise, the owner can be significantly damaged without any recourse to the contractor. The alternative is going to be owners chasing the contractor for actual damages- that actually will increase the cost. And yes, we have collected LD's on a number of projects, including CM at Risk projects. Disagree here.**

Try thinking of Liquidated Damages as what they really are: the triggering of LDs at the end for late completion is evidence of an overall failure by multiple parties to properly plan, contract and execute the project in the first place (as well as selecting the wrong contractor). LDs and their first cousins ("blame" and "litigation") are too often a result of the adversarial tendency to merely shift risk, not professionally manage risk in the owner's interest. If late completion actually sneaks up on everybody out of the blue with no warning, with no accumulated previously-missed milestones and with no action or remedies (including acceleration, withheld payment or looming termination) having been implemented by anybody when there was still time to resolve impending delay issues, then multiple parties were likely asleep at the switch. Construction contracts and front-end specifications should anticipate and spell out who does what by when and provide for project-specific remedies if/when the expected does not happen. Monitoring progress—or the impending lack of it—is, in fact, a basic focus of proactive Construction Contract Administration.

As discussed during the webinar, Liquidated Damages for late completion are not in the Owner's interests due to multiple hidden and/or unintended consequences, including: a) Subs bid higher to cover uncontrolled risk, b) Self-protection by subs = ironically slower, less teamwork, c) Rush to avoid LDs cuts performance & quality, d) LDs are (seldom or) virtually never paid, but nearly always induce blame and increase everyone's legal costs. However, incentives for on-time completion or other owner benefit do work, virtually always.