**Design-Build Best Practices**

**Greg:** Good morning, everybody. Thanks for coming to discuss Design-Build best practices with us. The points that were going to talk to today have just been recently published by the Design-Builder Institute of America (DBIA) as their first draft of the Design-Build best practices.

We’re hoping to get some good feedback from the audience with comment on some of these points, and then you can get the document online. We really would like the AIA to engage the document, discuss it, and then come back to the DBIA for some best practices on Design-Build. Without further ado, we’ll get going here.

Design-Build is growing as a project delivery method. To many owners, Design-Build is the preferred method of project delivery. Owners choose Design-Build for a variety of reasons, including accelerated schedule, innovative solutions, or early cost determination. Design-Build done right requires a different approach than the traditional Design-Bid-Build, and successful Design-Build teams implement best practices.

I have a distinguished panel of owners and designers here, and I use that word distinguished loosely. We have some learning objectives for you today:

* Best practices for procuring Design-Build.
* Avoiding the traps of Design-Build done wrong

If any of you have been involved in a Design-Build project that was done wrong, it can be quite painful, so we want to take about ways to avoid that.

* Assembling and managing the right Design-Build team
* Making the mental shift.

When I talk about making the mental shift, we’re talking about making that mental shift from the hard-bid adversarial mentality into a collaborative integrated team approach.

* Why Design-Build is growing as a preferred project delivery method and how to capitalize on the trend.

Who in the room has does a Design-Build project? About half of you. That’s about the same percentage of projects that are coming out with Design-Build right now, so there’s a predominance in the marketplace. We’re seeing a lot more Design-Build projects in the marketplace, so it is a growing phenomenon. Rather than fight it and resist it, hopefully we can learn some best ways to implement it.

Our panel includes Craig Unger, President of Unger Securities. Craig is former President of the DBIA. He’s an owner. In fact, Craig, why don’t I let you have a 30-second bio here? Tell the crowd your background, and then we’ll move on?

**Craig:** Thanks. I’m Craig Unger. I’ve been with the Justice Department for 26 years, most of which was with the Federal Bureau of Prisons trying to add capacity as a procurement exec. The last two years, I was the Federal Detention Trustee. I worked directly for the Attorney General and was responsible for the illegal aliens back when INS was in justice before there was Homeland Security, and then in a federal prisons with the Marshal Service.

Since the time I retired, as Greg mentioned, I’ve been consulting pretty much exclusively for owners who want to transition from traditional Design-Bid-Build to Design-Build.

**Greg:** The distinguished gentleman to the right of Craig is Pat Crosby, a principal and President of the Crosby Group of Structural Engineers out of San Mateo, California. Pat, gives us your 30 seconds.

**Pat:** Our first Design-Build project was in 1986. It’s still one of the better ones I’ve done as far as process of procurement, which is one of my big issues. I’m on the DBIA board, mainly for that reason.

I think that as architects you probably recognize the cost of chasing Design-Build. We were just adding up the other day that we almost have about $4 billion worth of Design-Build work under our belt right now, so I know the good and I know the bad.

**Greg:** To the right of Pat is Jeff Bradley, the Senior Vice President/Director of Justice at HOK.

**Jeff:** Thank you. Good morning. I’m Jeffrey Bradley from HOK Architecture. I’m actually sitting in for Jeff Goodale today. We’re basically co-directors of the Justice Program of HOK.

My background has been a little over 20 years in the justice industry, starting with secure electronic controls and getting to understand the intimate workings of a building and how it operates. If you follow a control system, you can follow it out to the facility functions and how they intend for it to operate.

Along with that, over the years, I’ve been able to get involved in a tremendous number of renovations, retrofits, and expansions, which I call the dirty jobs. They aren’t the greenfield sites. It’s been very enlightening to watch how those types of projects develop, whether it be in Design-Bid-Build or Design-Build.

However, now about 50% of what we’re doing are Design-Build-based projects right now. How to get those set up and moving in the right direction are key for them to be successful, and that’s what we’re going to talk about today.

**Craig:** Pat brought up a good point: the cost of chasing Design-Build procurements in a two-step phase where you have to provide a technical solution as well as a price or under a best value price cap. We’ll get into a little of that today. That could take a whole conversation in itself. Believe me, there are a lot of people working really hard to try to figure out how to crack that nut and do this in a cost-effective manner.

**Speaker:** I’m curious. How many people track that cost internally? What does it run percentage-wise to your fees?

**Speaker:** It depends. It’s like asking an attorney a question: it depends. If it’s a fairly prescriptive RFP and the work had been done and is fully accurate, it’s less than if you had to start the performance-based one with basically a program and you have to develop and design. So it varies.

To cover your costs and make this the staying point you need to increase your fees anywhere from 0.75% of construction costs to 1.25% of the construction cost, to cover not only that pursuit but also add money to the bank for the next pursuit, because you can’t win every one of these things. I think for the sustainable business model, you just need to charge more.

**Speaker:** Sure. Is it fair to say that you spend your profit chasing the job?

**Speaker:** More than the profit.

**Greg:** That’s a big problem we all have to work on to come up with some good solutions on how to manage that. We’ll talk a little bit about that. We won’t drill too deep into the weeds.

Let’s first talk about what a best practice is. A best practice is a belief that there’s a technique, method, or process that is more effective at delivering a particular outcome than any other technique, method, or process. The notion is that if you follow all those best practices, you will be successful. I think that’s pretty straightforward.

Here’s a quiz: in an integrated project, which is the best practice? The way this is going to work is that I’m going to put up a best practice, I’m going to ask the panel to respond to it, and then I’m going to want the audience to engage in that conversation.

The first best practice has to do with procuring. We’re going to talk all the way from procurement all the way through project delivery.

An owner should conduct a thoughtful, proactive, and objective assessment of the unique characteristics of its program, project, and organization before making the decision to use Design-Build.

**Pat:** One of the things we’ve noticed is who is the owner? Is the owner internal, or do they go out and hire a CM to be their owner’s rep? We’ve struggled with both. A lot of owners aren’t educated in the process and don’t know Design-Build and are lost when it comes down to it, but also a CM may not be the perfect partner in my belief as far as for an owner because they have maybe not aligned objectives with a Design-Build team. It’s something we would like to open a dialogue about and get your experience, as well.

**Greg:** What about education? How does an owner get educated on what these attributes might be? Is that education important? Can you come off a hard-bid job and go right into a Design-Build job and expect to be successful?

**Pat:** No, I don’t believe so. I think DBIA has courses and has done a lot in the last few years to engage owners as part of the process. I know, for instance, that LA County has spent a lot of money trying to get their group educated. I’d like to see a lot more public sector and private sector people go through the DBIA process. It’s a little self-serving for this panel to state that, but it’s really worthwhile.

**Craig:** Countering what Pat said earlier, I had a chance to work with a lot of agency owners, most in the public arena. I don’t know what’s worse: an owner who has zero experience – as you mentioned – or, on the other side, an owner who’s performed so many that they have internal procedures and policies but they’re not aligned with what we’re trying to reflect as best practices.

Particularly in some of the larger DOD, and whether it be the Core or NAVFAC, a lot of folks started there and came up through their entire career or they see one. They see the owner’s slice, as I did for 20-some years, and it wasn’t until I’m out and about and getting a better understanding of what putting all these terms, conditions, and clauses in a contract means to me from my government perspective, and then not fully understanding what that really means for a practitioner’s.

I almost think it’s easier for me when I’m helping an agency that has little or no experience, and they are more readily acceptable to navigating to what we’re trying to provide or breaking old habits they’ve always done. Each one is obviously different.

As Greg mentioned, with education, we’ve had this certification workshop since the late 90s, trying to get people through a series of courses. I know there are certifications out there from various organizations, but with them, we really tried to focus in just on owners. Everybody’s invited, but we try to educate the owners on those three rings.

Those of you were there last night might remember the three rings I had up there: select the right team (we spent a full day just on that), transition performance base (we spent about a day-and-a-half on that), and then the final half-day is on balancing risk and reward, having some type of award fee or incentive post-award to make the process go smoothly.

**Pat:** The owners who we’ve found do the best in my history are the ones who do project risk assessment and those owners who really understand their risk, the contractor’s risk, and the design risk. There are very few, but I think more and more are getting educated towards the process.

**Jeff:** Frequently, when you get an uneducated owner, you can actually help them write your contracts for yourself. They’ll lean on you. They ask, “What do we do now?” That’s where you can lean on DBIA, get one of their contracts, and massage it with them. Frequently they need a lot more help than they realize.

**Speaker:** Reading your statement up there, it’s almost reading like, “When would an owner be best served to use the Design-Build practice versus the traditional Design-Build-Bid” That’s what I’m reading out of that statement there. The question, so far as the panel, is concerned, “When would you recommend to an owner to use the Design-Build? For what building type and size and so forth?”

**Speaker:** That’s interesting. The state of California has a Senate bill. I think it got tabled right now. They’re doing two things with this Senate bill. One, they’re trying to unify the contract basis among all agencies so the state act likes a single state rather than every single agency having different Design-Build contracts.

The second thing they were trying to do is take it down to a million dollars. The state of California is very eager to drive Design-Build down to every project that they have. I’m not sure that answers your question.

**Speaker**: So the state can mandate the use…

**Speaker:** That’s the push that we’re seeing in the state.

**Craig:** Let me underscore that. I’ve had a chance, on behalf of DBIA, to testify before half a dozen different states’ legislatures that are trying to act enabling legislation to allow Design-Build.

It was interesting to me, after being a fed guy all these years and knowing what the Clinger-Cohen Act provided back in ’96 – and a lot of the states followed a similar procurement code when they’re first starting – I would just be amazed that different parts of the country could only do Design-Build vertical, not horizontal.

In fact, Texas and North Carolina had authority to go vertical. I think states like Ohio at the time who could only do horizontal and couldn’t do vertical. There are states that can only do Design-Build for $20 million and above. We’re all over the map.

This is where I violate DBIA’s ethics. We’re supposed to be project-neutral and say that every project stands on its own, but I’ve done enough to say I really honestly can’t think of a project about which I would immediately that I would not use Design-Build on.

Before I finish that thought, I have worked with enough agencies and owners. If they can’t rethink the source selection process, if they can’t get out of the details, if they’re going to micromanage the post-award – and I say that as a control freak – and if they don’t understand the risk shift, I personally recommend that Design-Build is not going to work for them. I think it’s more of the agency owner than it is a particular company.

**Speaker:** A lot of owners will take Design-Build but they’ll develop a very prescriptive bridging document. So all the time saving that you would recognize in Design-Build is lost because they spent a year doing the design anyway. If an owner’s going to do that, I’m not sure that Design-Build is the best model for them.

If they can’t let go of the control, if they want to control the design to the nth degree, Design-Build is going to be a very difficult process for them.

**Pat:** Federal has a sophistication. State has a sophistication. For counties, it depends on your county size. When you start getting down to the mid-size country – let’s say a population of 250,000 on down – then it depends on what staff they have on whether or not they can go ahead and execute something like this.

Counties that range between 100,000 and about 250,000 population have about a 50/50 coin flip on whether or not they have the staff who can execute a Design-Build-type project. They can go outside and get a program manager to come in and help them do it, but even then, sometimes they’re either, one, intimidated by it, or two, don’t have the cash to do that. Then they end up deferring back, going back to their traditional Design-Bid-Build.

It depends on their sophistication level and the size of the amount of resource they have to help bring a project forward.

**Jeff:** A few years ago, Penn State University did a study for the Construction Industry Institute and came out with some recommendations on the different delivery methods – advantages and disadvantages, best practices. I think it’s still out there but I’m not sure if DBIA is still using it. It had it on its list of publication a few years ago. It’s been several years – probably eight years ago.

The measurement was complexity and size of project and intent of attaining best value. It was a 50/50 break between construction management and Design-Build, with Design-Build offering speed of delivery and cost as its two principle advantages at that time over construction management.

Being in a municipality about the size of 200,000 people resident in our city **[19:10 inaudible]** embracing all the methods, including the launching the Design-Build on larger properties, and looking at a smaller sized projects, too, asking, “Is it going to be worth it to us for a $4 million or $5 million dollar project? **[19:26 inaudible]** construction manager instead of **[19:30 inaudible].**

We’reexperiencing all the problems that other owners were experiencing with awarding to qualified GCs and subs in a hard-bid environment. We find out trying to award, post-bid award **[19:47 inaudible]** and finding that we’re not able to get the best-qualified **[19:52 inaudible].**

**Speaker:** I think it all depends on the type and size of the project. The sophistication of the owner, I think, is also a factor.

**Craig:** Yes, it’s getting stale. It was 1999 when it was conducted. Maybe during 2000, the data came out. They looked at 351 projects – small, large, vertical, horizontal, public, private – and as you just mentioned, they assessed some of the advantages and disadvantages of each project delivery.

I know from my time heading up DBIA and the current board now, it would be great to have that updated. It think it may be in the process of being updated. But if DBIA is involved in any type of study directly, it’s almost tainted: “Of course, Design-Build comes out on top.”

It would be great if some independent third party that would give some type of that.

**Speaker:** Funny you should ask. The Charles Pankow Foundation took that study, along with CII and a few other organizations, and has funded a new research project to update that study. In fact, Victor Sanvido and Mark Konchar, the two original researchers on that project, are advisory members of a new research project that’s underway right now at the University of Colorado and in conjunction with Penn State. Obviously, we have IPD now, we have advanced our skill set in Design-Build, and so that study should be updated.

In fact, I urge you all to go to the Pankow Foundation website and register your project if you have Design-Build projects. They’re trying to get at least 350 projects – the more the merrier. Go to the website if you have Design-Build projects or any kind of project. Just fill out the survey. It takes 20 minutes. You get your owner to sign it and off you go.

There was a comment in here: “A lot of owners like to have control of the design, and therefore Design-Build doesn’t work for me.” What about in a QBS solution or solicitation where you pick the team without a solution and then you just go?

**Speaker:** I don’t know if anybody’s chased SFO. I think Curt is here. SFO is mandated by the city and county of San Francisco’s that they have to use 60% of their points towards price, which automatically makes it a low-bid process.

But they did it a little uniquely, where they said, “If we have a $100 million project, we’re going to take the GC fees, overhead, general conditions and design keys and lump that onto $100 million. Then we’re going to compare everybody.” Now, the fluctuation is a lot smaller.

So they were able to get rid of the pricing component, which I think for the success of the Design-Build among architects, is going to be key to get as close to a quals-based selection process as possible.

They did that and now instead of getting just 60 points for the low guy and the next guy might get 45 points because he’s high, the fluctuation is a lot smaller, which makes the other 40% of the points on quality on the main selection basis. So they truly pick on best-qualified person or team.

**Jeff: [23:21 inaudible]** telling me about the bridging documents being very prescriptive. I don’t know if DBIA is working on it or anybody else, but I think trying to get some type of standards developed for bridging documents would be **[23:36 inaudible]** because quite frankly, as architects, we’re our own worst enemies when it comes to that. We create all kinds of problems. We take it too far.

**Speaker:** I will agree with that.

**Jeff:** In my opinion, when I do bridging documents for a client, I say, “Let’s document everything that’s mission critical, something that’s very important to you, and leave everything else to the Design-Builder, and get into uniform **[23:58 inaudible]** specification, where we’re specifying systems versus CSI, where you’re going through every little **[24:04 inaudible]** and everything else.”

I think if we get some standardization on these bridging documents, it would be much easier for us as the Design-Build teams to react to those things, and they get a better value for the project. Do they really care what care about the type of structural system as long as it stands up and **[24:22 inaudible]**?

**Speaker:** I like you. Yes, I agree.

**Speaker:** He’s a structural engineer.

**Greg:** Let’s move onto the next best practice: an owner should implement a procurement plan that will enhance the collaborative and other benefits of the Design-Build, with the procurement plan being in harmony with the reasons the owner chose the Design-Build delivery system.

It’s a little variation on the previous point, but obviously, it’s important that the owner be picking the team for the reasons that the owner selected Design-Build, so you should be looking for those characteristics in the team.

How important is qualifications of the team?

**Craig:** It’s everything. Obviously, the group peer has always selected based on their qualifications. All of a sudden, you bring in a contractor, and that’s out the window. But when they hire a contractor, nobody at the table is going to be pouring concrete, raising steel, painting drywall. It’s a management team. It’s a design team and a management team.

The owner really should be picking the best qualified construction management team, which is a contractor, and the best design team that mirrors the same goals as the contractor’s, or vice versa. I don’t know why price has to come into it. Projects cost what they cost.

**Pat:** We talked a little bit last night about the two-phase federal model, which most of the states follow relatively closely. Phase One is truly QBS, so owners have the ability to truly down-select the three most highly-qualified. Why we would want to go with four or five is beyond me. It’s hard enough finding three premier A-teams to present that. And that is strictly qualifications.

Some of you have been through these competitions enough and not won. Say all you want about best value and all these other management approaches, at the end of the day, if I’m on the shortlist and I’m not low, I don’t win.

So I think it’s imperative to have either a carryover or still an element of source selection evaluation factor in Phase Two. “Okay, we have the three best. Now, how do we look at something other than low price?” We certainly want the solution. We want the most sustainable and energy efficient. However we’re defining it, we want value and aesthetics, but then still have that team.

That’s what I see. “We already went through that. That was Phase One,” and there’s no correlation other than they go right back to the widgets and dollars.

I think Greg will say it or has said it: DBIA has put this out there and we got a lot of input from a whole lot of different individuals. We hope to get feedback from the **[27:22 inaudible]**, and all the other organizations, but selfishly coming from AIA, how would you tweak it?

I would submit that most likely, if we did have QBS available for Design-Build, AIA’s position would probably be different. Maybe not, but I think it would be since you’ve done it for so many years. I don’t think I ever had a protest the way we went through QBS over the years with architects. We used to get them out of the woodwork on the other side.

Originally, the State Department did what I think is the worst possible way to do Design-Build. That’s down-select and then tell those folks that we’re going technically acceptable to my bridging documents, low price. It didn’t work, and they’re the first to admit they have gravitated away from that.

I heard that for one of the major agencies – maybe NAVFAC or the Core – that’s the new model they’re going to. I just can’t imagine that AIA wouldn’t want to weigh in either there or in these best practices. I personally think that’s dangerous. If I saw a project, I would not put my name on a project that was going technically acceptable, low price.

Anyhow, I don’t know what your thoughts are. Maybe some of you have been involved on those.

**Speaker:** What’s your recommendation on the Phase Two question, as far as level of effort?

**Craig:** This was actually put out two great Michael **[28:58 inaudible]**. They went at 30,000 ft. “Let’s look at horizontal wastewater – anything we can think of – and say, ‘Let’s start here, and then when we get feedback from industry, let’s look at the different sectors.’ I know I’ll be focused in on the federal sector. There’ll be someone else doing transportation and someone else doing wastewater and whatever committees we have.”

That’s what I’ll advise what I recommended in a Phase Two source selector criteria. Of all the easements and write-aways and eminent domains, there are several more issues. I know what the transportation guys have to go through with **[29:34 inaudible].** We know it’s not a one-size-fits-all.

But I don’t know that we get into the details of what we’re recommending yet here. I know I gave a lot of feedback. When I looked at, you could see they’re pretty overarching broad statements.

**Pat:** One of requirements states here, “Owner should be mindful of the level of effort required by proposers.” The County of San Diego, at their first approach on their big project, had a lot of requirements, and it was very costly for teams to chase it. Through Craig’s effort – he talked to the county, and he talked them down – the second project that they had had a lot less requirement-wise.

This is the big dilemma for Design-Build: when it came down to choosing, best value was still part of it, which meant contractors being risk averse-still wanted the documents. They still wanted to see what they were at risk with. So the design team still had to go almost the same amount of effort. Even though the county didn’t require it, the contractor required.

I think this is going to be a big hurdle for Design-Build, especially from the designer’s standpoint: how much does a contractor really need to have document-wise to reduce his risk?

A lot of stuff, they have seen before. For instance, structurally they know pounds per square foot of steel. They know how much it is for drywall. They know a lot of it, so why do the designers need to reassure them with the amount of risk that they’re at? It’s a real problem I think in the Design-Build for designers: to limit your risk.

**Jeff:** I think it kind of depends on the contractors. Some contractors are very good at conceptual estimating. **[31:18 inaudible]** database of information. They’re comfortable in that environment. Other contractors take off what’s on the drawing…

**Speaker:** And bid it.

**Jeff:** **[31:25 inaudible]** I think it really depends on who you’re selecting as your partners moving into a Design-Build project.

**Speaker:** A question about the price, about stipulated sum. Do you think that helps get it more of a best value selection?

**Speaker:** It takes out one big barrier.

**Speaker:** Yes. It makes the selection clearly based on value as opposed to price. In my mind, if you have to put cost into the equation, and virtually public agency asks to, then the stipulated sum approach is the only way you’ll get it down to a true-value based…

**Speaker:** Just so we’re all clear, I talked yesterday about disclosing the budget, but stipulate a price. It’s pretty much all the same thing. You tell all three teams, “This is how much money I have. Basically, if you come in a dollar over that, we don’t have a dollar more, that’s what we have to appropriate, you’re not responsive. If you come in a dollar under that, thank you, but it’s not going to help you win because here’s my mission-critical and here’s my list of desires.” The scope is the variable.

It’s a buyer’s market. The last four or five years that I’ve personally used that with agencies, they’ve just been blown away when the competition is something other than being cheap. I don’t want to be so naïve to not know that almost everything’s been a bargain in the last few years just because of the market conditions.

**Jeff:** That’s really going to be dependent upon how good an estimator the owner is.

**Speaker:** Well, we just won a federal project, and their budget was between $25 and 100 million. That’s a lot of help!

**Speaker:** Is that one about low bid, or is it about best value?

**Speaker:**  Exactly. They were pretty descriptive bridging documents. Still, nobody knew what the target was and how much you could tweak the design, just to be as low as you could possibly be. That’s too big a variable. I agree with you. In Design-Build, it should always be stipulated that you should design to a budget.

**Greg:** The question came up of what is required to make that choice in the best vale in a two-step selection. In the first step, you’re qualifying the teams. In a Design-Build, you’re going to be looking for the quality of the designer and their past performance. For the contractor, you’re going to be looking at their safety record, their past performance, all those things.

You don’t need to ask for those things in Phase Two. Once you’ve selected your team, forget about those things, and don’t ask the team to talk about their safety plan in Phase Two. You want them to talk about the value that they’re bringing to the project.

**Speaker:** Let me follow up. Again, we’re looking for feedback from AIA. In the traditional linear Design-Bid-Build… I had a contractor **[34:30 inaudible]** qualifications**.** We designed the whole thing, said what the budget was, then went out to bid it, and if the bids came in over that budget, you were required to redesign at no additional fee to get it back to budget.

Why in a Design-Build environment shouldn’t that same philosophy stay, rather than this worthless range? We would tell all three, “That’s the budget.” I don’t know why we can’t get DBIA and AIA to go beyond that owners should be mindful. We ought to say that we ought to disclose it and we ought to pay a stipend. That’s the best practice that we’re saying.

That’s why I said they’re intended to be overarching. I head up the federal panel. I’ll get into the weeds and list all these things and probably offend everybody in some capacity. But in any event, we would love to have what AIA’s position is, or from independent members – however we can get it – to help us finalize this document.

**Jeff:** The stipulated sum works if the bridging documents when they go out the door are within the stipulated sum. Sometimes the counties or whatever agencies will say, “We’re $10 million high, but let’s turn it over to the Design-Build teams and see what they can come up with.”

**Speaker:** Value engineer it for us.

**Jeff:** They’re asking $10 million high, but they should have been $20 million. They don’t go back and redesign and get the thing under budget, or it comes out on budget when the thing is released – Phase Two – and the next thing you know there’s a zillion addendums that increase the budget another $10 or $20 million.

I think the key to successful Design-Build is that what’s done before the contractors and Design-Build teams get the information is on budget, is one scope, has everything identified to be there, and then there’s a much better chance of success.

**Speaker:** To tag onto that, you’ve seen where they come up with the base and then say, “Also, price this addition out, and this addition out,” and you have 14 additions that you have to price out, and they’ll just cherry pick what they think the best value is. You can’t design to a solution, and it’s horrible.

**Greg:** One thing that we have seen that seems to be pretty effective is if the owner prequalifies his team to the shortlist and then gives the RFP draft to the prequalified teams to review and get feedback on the cost, the quality, or whatever, and then puts out the final RFP. That seems to take a lot of these things off the table and address a lot of them.

Moving on: an owner using a competitive Design-Build procurement process should ensure that the process is fair, open, and transparent using clear evaluation and selection processes.

Can everybody agree on that? I think so. What about stuff like unforeseen conditions and all that stuff that we always seem to come across?

**Speaker:** There’s an interesting lawsuit in Hawaii right now where the owner – I think it was the Navy – put out a Design-Build project and they put out a geotech report that said basically that it had light to moderate expansive soils. The Design-Build team came in and won the project, got their own geotech, and it came out that it was highly expansive, and so they had a change order to make all the structural changes. Then they went to claim it against the Navy and the Navy said, “You live in this area. You should have known.”

It was ridiculous, but that’s the Navy’s stance. “You guys are educated enough. You should have known that, even though we stated it was low.”

**Speaker:** Who would have known there’s volcanic rock in Hawaii?

**Speaker:** I think it goes back to the fact that the owners really need to be educated in the Design-Build process and understand the risk that they have and what the contractor has and what the design team has. I think when you get smart owners, Design-Build is a beautiful process.

**Greg:** What about confidential meetings in that lead up to the RFP submittal?

**Speaker:** I like them.

**Greg:** Proprietary meetings.

**Jeff:** We’ve seen some proprietary meetings, though, where the owner will just listen and not give you any feedback, and that’s almost worse.

**Speaker:** We were guilty. The first one my agency did, the feedback was, “We’re trying to read crossed arms, leaning forward, and facial expressions.”

There is this reluctance that we’re not supposed to guide design, but I think it’s important to be able to express preferences, and if we’re in left field or right field, we don’t waste the Design-Build team’s time or the source selection.

Most of what we teach is that you can freely exchange information. The golden rule is that if a question comes up during one of those proprietary meanings and I can’t go to the RFP and say, “Good question. In accordance with Paragraph So-and-So Subparagraph here…” and clarify it, if I have to give you any additional information, then I ought to provide that same information to the other two teams.

That’s what we’ve said. If I’m just clarifying something that’s there, it’s a maybe. If I’m giving any supplemental information, then I need to be able to share that, so that the proprietaries don’t turn into some advantage for one. But most err on the side of not giving any feedback, which means they’re worthless.

**Jeff:** That’s the trouble. If you place that narrow a lane that you can work within in proprietary meetings as an owner, you’re doing yourself a disservice, because you’re not responding to what’s being presented to you. An inexperienced owner who’s given those constraints is just going to clam up, because they’re afraid they’re going to give something away that they’re not supposed to by the rules that are there.

**Speaker:** We’ve spent so much effort and so much resources protecting against a protest that rarely hits us – so much effort and so much non-disclosures. I get some owners who won’t even give the source selection. You have to go to a room and sign in like it’s classified.

That’s still probably the legal contracting officer’s side saying, “It is a negotiated procurement. We ought to be able to talk. If you do performance-based, guess what? You have three different solutions, so the questions are going to be different.”

I get some who say, “Every single one has to ask and answer the same question.” No, they don’t. One of them gives you a campus style and another one is giving you a totally different design, so they’re going to be different.

Good point.

**Jeff:** One client I’ve had handles that using bowling terminology. They won’t say, “Yeah, I like it,” but they’ll say, “Oh, I think that’s a gutterball.” Okay, that’s not a good idea. But you never do get the nod. You have to go ahead with what you have. It’s this bowling terminology. You might be going right down the middle of the lane and end up with a 7/10 split.

**Greg:** A good example is one we did recently in a school in – I think – Indianapolis a couple years ago. We had three great teams and three great solutions. We had a very constrained site. Even though it was on a corner, the landowner wouldn’t allow buses to enter the site. The bottom line is that one of the three proposed a three-story middle school.

It looked okay to me. I’m sitting there with the source selection, and as you might imagine on some of these schools, on the evaluation panel, sure, there’s the guy who’s going to do facilities management and there’s a finance guy there, but you have two from the board of education – a nurse and a teacher who’s going to be the principal. If you could see the look on their face, I don’t think there’d been a three-story middle school built in Indiana since the Hoosier days of the old movie. If we had not said gutterball – I’ll use that from now on – they would have proceeded and it was just dead on arrival.

My advice here is that’s not guiding design, but if it’s left field/right field, you owe it to the team for them to make a course adjustment. Otherwise, they wasted all their time, and you’re going to go evaluate it and you waste your time. That’s what we collectively say as best practice: the proprietaries ought to be an open exchange with no one getting an advantage.

Now, I look back. Should we have been smart enough and said in the RFP, “Two stories or less”? Yes, we should have done that, but we didn’t think of it. I think that’s a perfectly legitimate question and response. It didn’t give anybody an advantage. We advocate that. Again, I would love unless feedback coming from why that’s not a good idea.

**Speaker:** I think there are two types of proprietary meetings. One is if it’s a heavily bridged Design-Build project, and one if it’s not. The problem with the design field – and I’m guilty of this, too – is they’ll come up with the bridging documents and say, “This is what we’d like,” and we spend a year doing this, we’ve talked to all the users, and stuff like that, and the Design-Build team will come in and have six weeks and say, “We have a much better idea.” They’ll spend the proprietary meeting saying, “We’d like to change this and change that and we can make it all better.” Usually the owners are saying, “Wait a minute. We like this. Why aren’t you spending the time telling us how you can make this better or give us more value based on this?”

I think we have to use these meetings for what the owners really want. This is an opportunity in six weeks to better a team that’s spent a year doing it. I see a lot of Design-Build teams fail on that part. They’re so busy trying to reinvent the wheel because they think they’d have a better idea, rather than saying, “We understand this is what you want. Let’s see what we can do to get that for you.”

**Jeff:** By nature, designers like to design, so they easily get off track. If you just keep to the scope and what the owner’s asking for, you’ll probably get better results.

**Speaker:** You’ll win.

**Participant:** Let’s focus post-award and talk about the team composition, including the owner, particularly when you have a more sophisticated owners and some architects and engineers on the owner’s management side, where the owner wants to be involved in a proactive way with the team.

How would you describe that organization and process? In your experience, do you see Design-Build team not wanting the owner in the office looking at the project as it evolves? What are your thoughts?

**Speaker:** In my experience, the best Design-Build project I was ever involved in had a heavy partnering component to it. Yes, we can all communicate and stuff, but there was no benchmark to ensure that we were communicating. When you start to partner with the owner and the designers and the contractors and the major subs, then you can measure your communication level and see what the degree of happiness among everybody is. Partnering I always believe should be a heavy component of the Design-Build process.

**Speaker:** We typically reinforce that point of owners needing to be engaged. Design management post-award is the most challenging. The only thing worse than an owner who’s a control freak micromanager is a missing-in-action owner who can’t make a decision through the process.

Back to the essence of your point, usually when I get to this Phase Two and we’re getting ready to award, I ask the Design-Build team to tell me the role of the owner that they see in their management approach, and by the way, tell me the role of the designer record post-award.

I clearly see as an owner the value I get from Design-Build. I get that constructability review, conceptual planning, and conceptual estimating in the process. What I see and I ask in almost every one of the RFPs I put out, we don’t see what the role is, because I know that most of you, when we did the old way, if you didn’t get a fee for being there post-award onsite, I can’t expect you to do all the QA and review submittals and shop drawings and change orders and all that, so instead of dictating, I’m going to ask these teams to tell me the role of the designer, architect, engineer of record during the construction phase.

It opens the veil of seeing how that team truly is. Are they integrating, or is this just business as usual?

**Speaker:** It is a huge added cost. I look at my cost in CA for a Design-Build compared to a Design-Bid-Build. It’s hugely different. I don’t think our field is taking that into account when it comes to fees. You talk about the chasing fee, but also the follow-up construction part of the process is huge.

**Greg:** I would suggest that the old AIA model of 15, 25, 40, 45 should be thrown out. It’s probably 15, 45 – a big heavy upfront, support in the field.

**Speaker:** I want to know from your standpoint, when you’re on a debrief, particularly when you’re unsuccessful, what do you want to hear?

**Speaker:** The truth.

**Greg:** What you want to hear is when you’re going to get your stipend.

**Speaker:** What the stipends?

**Speaker:** Too low.

**Speaker:** Why would an owner want to give a stipend?

**Speaker:**  What we hear from owners all the time – especially public owners – is “How do I justify to the public that I’m paying for three designs?” They just can’t mentally go there. But like you were saying, stipends to us play for the party when we lose. It pays nothing.

**Greg:** I think there are a number of reasons why an owner would want to give a stipend. One is to attract talent and show that they’re serious about it. Two, in a robust market, they need to have an incentive to get the talent to the team, and in a down market, they need an incentive to get the talent to the team.

I think your point is good. A lot of owners I’ve heard from will say, “Well, we just can’t give money for nothing.” Well, we also want to see them be able to use those designs if there’s a good portion of the design. In essence, they’re paying for the rights to use portions of that design, so there’s a lot of value in stipends.

Let’s keep on moving here: contracts used in Design-Build projects should be fair, balanced, and clear and should promote the collaborative aspects inherent in the Design-Build process.

I think that’s a truism. It should probably identify risk. Where does risk come in in there? It probably should have language that a layman could understand.

**Speaker:** Good luck.

**Speaker:** I think there’s a struggle, and I think this is why AIA tends to go to the IPD process. In a lot of cases, I’ve seen it be true that the contractual relationship really occurs between the owner and the contractor. The contractor is worried about risk and money and stuff, so the communication stays right there.

The design team feels left out. I’ve seen it where they’ve had actual agreements and met and come to design conclusions – just the contractor and owner – and left the design team completely out of it. I think that’s a real concern. I think that’s why the owners need to ensure that all parties are represented when they start to contract and communicate. In the contractual arrangement, there has to be a defined communication process.

**Jeff:** It’s huge problem when you have a flow-down contract. You have the contractors warrantying things and guaranteeing things on indemnification and other kinds of legal clauses that architects cannot do and maintain their insurance. So you end up getting the contract, the contract is ready to go, “Here’s our agreement with the owner. Everything that applies in there applies to you. Please sign here.” I can’t do it.

**Speaker:** Let me ask you a question.During the competition, it’s Phase Two, I have three teams, and I go back to you and ask you for your best and final, and I say, “Oh, by the way, provide me with a copy of your teaming agreement.” Good idea or bad idea?

**Speaker:** Good idea.

**Speaker:** It should be a mandate

**Greg:** Great idea.

The contract between the owner and the Design-Builder should address the unique aspects of the Design-Build process, including expected standards of care for the design services.

How are the design services different in a Design-Build versus a Design-Bid-Build?

**Speaker:** I don’t see any difference. You still have to detail everything. Everything has to be there, because they’re going to have some of the trade partners – the big MEP guys – as part of your team. They’re doing stuff on their own. They’re developing their documents.

Even though it’s a Design-Build project, there are going to be pieces of that that are going to be bid out to the smaller guys. You’ll get two or three bids for drywall or toilet partitions, or whatever it might be. Everything needs to be detailed to the same degree of thoroughness as you would in a bid environment, in my opinion.

**Greg:** What about the concept of teaming the architect with the specialty trades and going from the napkin to the detail?

**Speaker:** Again,It depends on the qualifications of the MEP subtrades. Some of the MEP guys can really do Design-Build. They have their own team of design engineers, BIM, and all that kind of stuff, and they’re great at that. Other guys are great at shop drawings, but they’re not good at design, so you really need the design engineers to get them over the hump of the major design systems, get them to the point where the subcontractors can start detailing like crazy, with the duct layout and the pipe layouts and the conduit runs, and all the other stuff. It all has to be coordinated.

**Speaker:** I think for some simple buildings – HVAC, simple stuff – that’s fine. I think when you start to get more complex – like laboratories and stuff – I’m not sure whether you can do that. I still think you need the design component to be part of your design team. I just don’t think most MEP contractors can do that level of sophisticated design. I think you have to be careful.

**Jeff:** I’ve also asked, say, the mechanical sub, “Once you are hired, our mechanical engineer can work for you.”

**Speaker:** We’ve been asked to do that as the structural to work under the steel fabricator.

**Jeff:** That’s very effective because that way, he’s working for the HVAC or electrical guy or whatever it is…

**Speaker:** That’s just contractors shedding risk.

**Jeff:** Yes. **[53:59 inaudible]**

**Speaker:** Let’s say it’s a truly performance-based that aligns on paper lab or whatever it is. You submit your team to me, and I see who my designer or engineeror architect of record is, and then let’s say we do electrical. It’s a huge well-qualified electrical, and they’re doing their own design and they’re also going to build it. So who’s the designer of record? Them or my teaming agreement that shows **[54:34 inaudible]** and Hensel Phelps or whatever? Who’s the designer of record?

**Jeff:** The person who seals the drawings.

**Speaker:** Which will be in that the case the subcontractor.

**Greg:** I think we picked a low-hanging fruit there with the MEP because we’ve seen that being done. But what about the building envelope? When I was practicing architecture, we would put ten pages of roofing details together because we wanted to work it all out, and then we would give them a spec that said, “Per manufacturer’s warranted details.”

What about the concept per manufacturing warranted details and then flipping it over and checking to make sure those details work? So think broad. Think beyond the low-hanging fruit.

**Speaker:** What’s your reaction to that?

**Speaker:** Like on the roofing?

**Speaker:** Yeah.

**Speaker:** Whatever happens, this is why the construction administration phase costs 40% of the Design-Build job rather than the traditional 20% of 25%, because once they bring the roofer on board, the roofer is going to say, “Oh, I can do it cheaper and better if I do this,” or, “I can do it better over here if we do that, and I can save some time if we do it like that.

“Okay, let’s get those drawn up and get going.” That’s the way it works.

**Speaker:** Do you find that you draw less or detail less in the Design-Build environment versus Design-Bid-Build?

**Jeff:** I think eventually you have to detail more, because you have the baseline, and then once the train is on board, there are always adjustments to make it better and cheaper and faster.

**Speaker:** One thing we’ve learned to do over the years of doing Design-Build is the communication part. They will bid out our structural steel, for instance. What I’ll do is meet with every person they’re going to bid to and start to communicate and show them the details and talk to them about their fabrication process and so on.

The whole idea is to reduce risk within the team. If you can communicate and they can understand you’re not going to be an obstacle for their success, their risk number, which is a big number in the construction business… It isn’t materials and labor, it’s just risk. If you can do anything within your team to reduce that risk, you will be more successful, in my opinion. I always have to throw that in there.

**Greg:** We’re going to move along here. This one is pretty straightforward. We can get into the details of it. I think everyone on the team needs to be educated and trained and understanding of the differences and the nuances in a Design-Build versus any of the other project delivery methods.

Project logistics and infrastructure should be established to support the integrated project delivery.

What are some of the strategies we might look at there?

**Speaker:** DBIA promotes co-location, correct? How many people have co-located on a project? Is it good or bad overall?

**Speaker:** Great.

**Speaker:** The only way to do it.

**Speaker:** Co-location needs to include the owner.

**Speaker:** From a designer’s standpoint, everything I’ve ever used to design is sitting in my office. How do I co-locate my entire office to one place? I believe co-location for the communication process is very important. For specific design and being there in design, I’m not sure it’s that great.

**Speaker:** The best co-locations we as contractors see is **[58:05 inaudible]**.

**Speaker:** I think that works well. Again,It depends on what you mean by co-location. If you’re all in the same city, it’s a lot easier to co-locate. If you have team from all over the country, it’s a lot more difficult. It’s been my experience that contractors travel pretty well, but architects really don’t travel well, and when they do travel, they tend to get in trouble!

**Speaker:** It’s like the GSA, huh?

**Speaker:** I mention BIM because obviously that’s a collaborative tool that, if an integrated team is going to take a better value, be able to use BIM to a greater degree. But with the new technologies we have, the concept of co-location is really a free and open exchange of ideas in real time. I think there are other tools that we can use to support that process.

**Speaker:** I will say that during the interviews with proprietaries, I’ve changed my thought process. Instead of asking, “Are you going to co-locate?” I’ll rephrase it to, “Tell me how you’re going to co-locate.” That’s a presumptive question to encourage that.

**Speaker:** Define co-location for this group. Is that everybody in the same room? Who’s in that same room?

**Speaker:** The co-location is when and where do you expect the owner to be, and where is that site going to be?

**Speaker:** It’s really mostly the management team and not the production team.

**Jeff:** Co-location doesn’t even have to include production.

**Speaker:** Right.

**Jeff:** The best ones we see are when we co-locate in onelocation on particular days. On Tuesday and Wednesday, we’re together.

**Speaker:** The big room, the big ideas. Yes

**Speaker:** And focused. Rather than everybody at the same time in one place, pare it down.

**Jeff:** In fact, do it in specific time slots. So on the morning of Tuesday, it’s structural, and then it’s going MEP later on, so people aren’t having to sit there because there’s the recognition that…

**Speaker:** You’ll get key members who will lose interest because they’re sitting in a meeting with nothing to say and nothing to do, listening to stuff that maybe only 5% pertains to them. I think you have to have focus, and then you still have to have to the big groups where everybody can listen in to what decisions have been made.

**Greg:** That leads us right to our next best practice: the project team should have established process to enable timely effective communication, collaboration, and issue resolution. That means talking together and working together.

Let’s keep on moving here: Project teams should be particularly focused upon the design management process, and there is an alignment among the team as to how this will be executed.

This speaks specifically to the design management process. Who has worked on a Design-Build team where there’s been a design manager from the designer builder’s side of the equation? Why do you think the Design-Builder wants their design manager in there?

**Speaker:** Time.

**Speaker:** Control time.

**Greg:** How about risk?

**Speaker:** It’s all about risk.

**Greg:** It’s all about risk.

**Speaker:** The problem is a lot of contractors – you guys are different – will sign somebody who has no design experience whatsoever, just to manage the design process.

**Speaker:** That’s inappropriate.

**Speaker:** Exactly. I think more contractors, if they really want to do Design-Build, have to hire an architect or somebody who’s educated in the design process to manage the design team – and it’s rare.

**Greg:** What are the skill sets required of a design manager?

**Jeff:** Let me answer that by what I need as a designer. What I would like to have from my Design-Build partner is someone who can beat their shoe on the table when we start running in issues of scope or schedule or other kinds of things like that – all the risk factors that the contractor is watching for.

I don’t need them to say, “We’re going to have a meeting on furniture next Thursday,” while we’re still trying to figure out the room layouts. We need an architect who understands the iterative design process, and we need a design manager to look at constructability, the options for alternative means of construction, scope and schedule. That’s what I really want out of a design manager.

**Greg:** I have another request since we just mentioned that. The Pankow Foundation, which we mentioned earlier, also funded a document called Design Management in the Design-Build Environment. I urge you all to look at that and then again, just like we’re trying to get feedback here, give them feedback so that they can put these kinds of things into the document and really define what that role needs to be.

**Participant:** The design manager becomes essentially the liaison between the designer and the builder in the Design-Build environment. You have to have the skills to understand not just what the design process is, but what the design, as it’s evolving, is doing to the contractual commitments for delivery on the project and your ability to meet those requirements from a contracting cost schedule scope. Really, it’s somebody who’s able to cover broadly the whole base and look out for both entities.

**Greg:** What about the owner? Is he there to look out for the owner, too?

**Participant:** He should be.

**Participant:** That’s a part of **[1:04:07 inaudible]** contractual responsibility.

**Speaker:** I think what we don’t recognize until we’re deep into a Design-Build project is how much the design is let out early to accommodate early construction, and you’re doing finished design on some parts where some part of the design hasn’t even been touched yet. That’s the real management, I think, when it comes to a contractor’s design manager.

**Participant:** Are youtalking about morefast-tracking?

**Speaker:**  I think all Design-Builds are fast-track. I’ve been told “When you finish the design, we’ll start,” and I get a call, “Where’s the foundation plan?”

**Greg:** There is a couple out there.

**Participant:** What type of communication systems have been the most effective throughout the Design-Build contracts you’ve been involved with? What systems work effectively in terms of both helping you with design management as well as communicating across the lines, top to bottom?

**Speaker:** I think the big rooms are part of that, but personally, we use GoToMeeting on fixed, defined times on a weekly or bi-weekly basis – twice a week.

**Greg:** I think there’s the communication aspect, but there are a lot of tools you can use, like design action logs, criteria compliance logs, or document deliverable matrices so that everybody knows what their responsibilities are, when they need to provide, and what they need to provide. I think what’s really important is to manage the flow of information in and out of the project. That’s really the design manager’s role.

I think we can move on. This is big one. This is where the DBIA really needs the feedback on how best to manage that process.

**Speaker:** This is the weakest link, I think.

**Greg:** We’re going to get to the real juicy stuff: behavior and culture. Establishing, nurturing, and celebrating a relationship and trust and professional respect among all team members and parties to the contract.

How important is that?

**Speaker:** Critical.

**Speaker:** It’s everything.

**Jeff:** I’ll say that there are some architects and engineers who have no business in doing Design-Build. Flat out, they shouldn’t be doing it. They don’t trust the contractors, they don’t trust the subs, there’s always this animosity moving into the thing, and they cannot accept the fact that the contractor is the client. They’re still the enemy.

You need to weed those people out of your team or get rid of them, because that will poison the job right up front.

**Speaker:** That goes for the other two entities in the project, as well. There are some owners who have no business pursuing Design-Build because the contractor will always be the enemy.

**Speaker:** That was the State Department. They had that attitude. The contractor is out to screw them.

**Greg:** Let me ask two questions here. Why is the contractor the Design-Build entity?

**Speaker:** Bonding.

**Speaker:** Risk and bonding.

**Greg:** Which architect in here would like to be the Design-Build entity? What do you need?

**Speaker:** Bonding.

**Greg:** Why can’t architects customarily bond?

**Speaker:** They have no emotion!

**Greg:** It’s a different business model between a design firm and a construction firm.

**Speaker: [1:07:53 inaudible]**

**Greg:** That’s right. We get the trust. I trust you. What about that professional relationship? How is that best effected? Is the designer subordinate to the Design-Builder, or are they equal partners at the table?

**Speaker:** Everybody has to be equal at the table. One of the things I think that really is important to stress here is that for owner or contractor or subs, there’s no single success. One piece of that fails and everyone’s failing.

**Speaker:** I would say that most contractors don’t believe that. They believe that they’re taking all the risk. You have no risk. You have no skin in the game, and therefore you should be second tier.

**Speaker:** That’s a very difficult thing for us to do.

**Speaker:** In my discussions with them – and this is late night drinking on some of these Design-Build projects – I tell them, “If the project goes south, every one of you will go and find another job. If this project goes south, my name’s on the line, my career’s one the line, and my livelihood is one the line,” and they don’t recognize that risk. They don’t perceive that.

It’s all about money and losing it on a project. That’s how they perceive Design-Build construction, and that’s something as designers we need to overcome and educate if we’re really going to be the third party.

**Speaker:** The reason we have that is for personal liability to signing the documents.

**Speaker:** Exactly. But they don’t understand that, and I think you have to tell your partner, “This is the risk I’m taking,” because it’s all perception of money.

**Greg:** I think we can sum that up by saying that if the contractor loses, he loses his house. If the designer loses, he loses his license.

**Speaker:** And his house.

**Greg:** You can go get another house. It’s tough to get a license.

**Greg:** This is really hard for most people in the contracting world to do. It’s the incentive to an architect. You were talking yesterday about the incentive of a contractor finishing early. We’ve actually tried the incentive with the architects and so forth, if the design is coming back and they’re helping us keep it in budget that there’s an incentive at the end of it for them.

**Speaker:** You’re doing it right.

**Speaker:** Interesting comment. It’s been a few years now, but on a major Design-Build job, I added an incentive. The architect was offended that I would infer they would perform better for more money.

**Speaker:** He needs to talk to me.

**Speaker:** I thought, “Wow.” It’s like a professional – whether a doctor or dentist or whatever – “I’m going to perform. The incentive is nice, but it’s not going to change my behavior.”

But I will say that if there are perceptions that the contractor is trying to save a buck, there’s probably also a perception that the design industry collectively is very much risk-averse.

**Speaker:** And always does the right thing.

**Speaker:** Tip your surgeon.

**Speaker:** Trust is a tough one. I work on the owner side, and I’m telling you, it’s difficult for the owner. For whatever reason, there’s a high level of confidence and trust in the design side, but high skepticism. That’s why I said with some of the questions we struggle with, I’ll ask them, “If this was designer-led, would you still feel the same way?” and most of them would readily admit no. But because you’re a sub in a lot of cases to the contractor, there is that old mentality.

**Speaker:** I don’t know what you guys think, but I’m starting to see that the good contractors – the contractors who manage well and understand the value of the design team – are starting to be the winners of all these Design-Build teams. You don’t get a wide variety on the larger projects of Design-Builds. It’s the top contractors who have the big picture that are starting to win.

**Speaker:** I think the idea that the contractors are taking all the risk is a little erroneous, because these architects are basing theirs fees on, “Let me see. I think by the time we get all this little stuff done, I could probably use 75 or 80% of what I’ve already done to be able to carry it forward, so I’ll base my fee on completing it**.**”

But in reality, after you get selected, they go, “Oh, we want to do something different now.” All the time you spent getting to that point is gone, and you’re basically carrying some from maybe a 30% effort of what you’ve completed to date and are carrying it forward.

So there’s risk on both sides, and the contractors I’ve been working with understand that risk. They see it and appreciate it.

**Greg:** We’ve got an integrated Design-Build firm down here.

**Speaker:** I was just going to tell a little story in terms of architects’ compensation. We have an IPD project with the contractor, a well-known designer. They wanted a different texture on the stucco – a slight variation, one of those that you put up there and everybody looks at it and nobody can see it, but you’re going “No, you have to do this.”

We said, “Well, it’s $90,000.”

They said, “We don’t care.”

Then we said, “In the IPD incentive plan, that’s $30,000 in your pocket. Do you still want this?”

They said,” We’re going to go back and think back about it.” They said, “That’s okay, we don’t have to do that.”

So sometimes, I’m not saying they would have done it for big design issues, but they did. The building had integrity, but there are certain items that are totally questionable in value, and I think that the incentive is made for some of these firms to reconsider what is important and if it’s actually adding value.

**Speaker:** The key thing for an architect firm on making money on any project is to stop the design at a certain point. If you don’t stop the design, you just keep spending money. That’s the key.

**Greg:** I’m going to mention another little story there, because the plaster came into my mind when you said this. It was a Design-Build project. The architect in recognizing the cost implications of different systems said, “It’s the penthouse. We don’t really care. We’ll put plaster on there. That’s the cheapest thing we can do.”

The contractor said, “No. No plaster. We’re doing metal panels.”

The architect asked, “Why?” and the contractor said, “Because if I have to put plaster on there, I have to erect scaffolding at nine o’clock every night and knock it down at four o’clock every morning because we’re on a live airfield. It will take me four months to do a plaster application, but if we do metal panels, I can fabricate them offsite and fly them in, and we’ll be done in two weeks.”

There’s the conversation, the dialogue, where architect and the owner got a better system, and the contractor wasn’t shutting down the airport for all that time. So the dialogue is good.

What else about behavior and culture can we take away as a best practice? What about picking your team members? What do you look for in your Design-Build partners?

**Speaker:** Is this where I pass out my card?

**Greg:** If you’re a designer, are you going to look for a contractor who has a history of litigation and low bid and adversarial relationships and expect them to be successful?

**Speaker:** I think shared values. To be a partner, you have to have those in common. If you don’t, I think you’re fighting it all the way.

**Participant:** As an architect, what I look for in a Design-Build contractor is a contractor who understands the design process, that while contracting is a very linear process – you set a schedule, you follow a schedule, it’s critical path – design has a tendency to be very iterative, and the contractor needs to understand why design is iterative and can put up with that or support that.

Then the other key thing, and the place where architects have the most risk, is in the conceptual cost estimating. We need really good real-time cost feedback so we don’t have to go back and redesign it later on, which causes the contractor schedule problems, and it causes the architectural team fee problems.

**Greg:** Who in the room in their firms use building information modeling? A fair amount of the room. How often is that model integrated with your contractors in the Design-Build process so that they can extract cost information in real time?

**Participant:** Depends on the contractor, honestly. A lot of them are still getting on board with being able to do that with the **[1:07:01 inaudible]** model.

**Greg:** It takes a process, though. It takes a commitment to quality in the modeling. It’s a different approach, isn’t it?

**Speaker:** You bring up an interesting point, because I think most architects have design teams who have learned how to integrate their model amongst each other and who takes ownership of what stuff, and I don’t think many Design-Build teams have come that far to bring the contractor in as part of the partner in the model.

I think that’s a problem. It could benefit them tremendously, but it doesn’t exist in most Design-Build projects.

**Speaker:** In selecting the Design-Build partner, I’ll go through my list real quickly. Number one, do they have a great relationship with the client? Number two, do they have a great relationship with the client?

**Speaker:** Or is it a gutterball?

**Speaker:** Do they have experience in this project type? Do they self-perform work? Is the work that they self-perform conducive to the project type? If it was a big concrete job, that might take me to one contractor versus a big steel job might take me to another contractor.

I think that the guys who self-perform have better control over the schedule and cost and they come up with a better price at the end. And are they willing to buy into the business deal?

**Speaker:** I have a question for the owner here. I’m seeing a lot of this, and I would like your feedback, as well. For so many Design-Build procurements, one of the measuring criteria is how many times you’ve done Design-Build jobs together.

I think it’s starting to force Design-Build teams to stay together when maybe that isn’t the best team for that particular project. But it’s such a heavily weighted criteria. “How many Design-Build projects have you done over $100 million together?” rather than, “Have you done Design-Build, Mr. Contractor? And Mr. Architect, have you done Design-Build? Do you have that mentality.” I think that’s more important than to have always worked together, because then you’re just forcing the same teams to stay together all the team.

**Speaker:** And, “Let me see your teaming agreement.”

**Speaker:** Exactly.

**Craig:** The comment I’ll add is basically what the lady was mentioning at the back. You have two business models that are totally opposite – a typical, traditional, linear and an iterative. We clash these together, and there’s a learning curve there.

I just know that back in my days in the Federal Bureau of Prisons, when we started seeing the same teams for the most part coming up third and fourth time, by the time we shortlisted, I literally felt such a comfort level I could close my eyes and throw a dart. Any one of those three teams who were going to give us a very successful project.

The other thing now, when I put out an RFP now, I say, “Past performance is critical. It’s probably the single most important discriminator in the evaluation factors. Show me the projects you worked on before.” Then I go one step further. “Show me the key personnel.”

Sometimes I see the projects where no one you’re proposing has done this. Again, there is a learning curve. To me, especially somebody who have had less than ideal encounters, when you say, “Never again. I’ll never work with contractor again or I’ll never use that design firm again.” I usually use the analogy of a date. If you ever ask a lady out on a date and either one of you didn’t have a good time, chances are there’s not a second date.

So from an owner’s perspective, when I see the design firm and the contractor coming back with some of the same personnel, there’s a good feeling there that the designer wasn’t – as owner’s think – knuckled under and doing something immoral, unethical, inappropriate.

**Speaker:** I’m glad you brought that up, because on the architecture side, one of the biggest challenges I think we see moving ahead teaming on major Design-Build projects, when we submit and agree to go with a GC and moving forward the process, but they haven’t appointed that their project superintendent, their project lead yet, then when it becomes time and it gets closer to the RFP, and now all of a sudden, they appoint to somebody, that person has never done a justice project before, but they were free.

How many of you have run into that, where they throw somebody off center who really doesn’t speak our language? I would say that’s more common than not.

**Participant:** When I was an owner, I liked the Design-Build process, but sometimes I would lean towards CM at risk because I was able to pick both members of the team. I could pick the architect I wanted and I could pick the contractor I wanted, but then you’re forcing a marriage that may not be successful.

But what helped me as an owner is if a Design-Build would – as Bill was saying – explain to me why they have come together, why they chose each other, and what culture they share, even if they don’t share experience, what values and culture they share, and why it’s a good marriage.

**Greg:** Moving right along now, I think we’re going to get into one of the sore subjects, and that is the ethical responsibility of the designer in a Design-Build mode. We’ve heard a lot of feedback that, “My ethics are compromised.”

The first ethical statement: if anybody debates me on this one, you can leave your license at the door, because I think this part of your licensing. Architects have a professional and ethical responsibility to protect the health, safety, and welfare of the public, regardless of the project delivery method.

**Speaker:** We actually had one where we identified a longstanding safety issue on a project, thinking that our contractor partner would be thankful and eliminate this from going forward. They essentially took us off the job. It was a real eye-opener.

**Greg:** Not very ethical.

**Speaker:** Would you team with him again?

**Speaker:**  Yes, with different personnel.

**Greg:** It comes done to the personnel. Let me expand this statement a little bit. Architects have professional and ethical responsibility to represent the client’s interests, including the need to provide prudent design guidance to the owner, the customer, and integrating those interests with the obligations of the project delivery contract.

**Participant:** I think this really goes to the heart of whether or not Design-Build is seen by owners as an attractive delivery method, because what we hear – and what I, as an architect, hear from a lot of owners – is Design-Build is really a lot of build and you don’t get a lot of design because your contract isn’t with the architect.

While historically the contractor was all about cost and schedule because the design had already been decided on and the program had already been set, traditionally, they have never had to think about that and they don’t have to worry about the value that that brings to the owner. The owner already has taken care of that. Now, they just have to deliver on the schedule and cost.

With Design-Build, the contractor has to get into the mentality that they understand why design is important to an owner and they support the design process and they support the design objectives. If they can’t do that, I think they limit themselves as a Design-Build contractor, because the most sophisticated owners who truly care about design are not going to want to go with this team, because they’re worried the Design-Build contractor will tamp down on that architect and it’s all about cost and schedule, and design is always going to come in third place.

**Rick:** I find that a lot of project managers who I deal with are very **[1:24:57 inaudible]** to the owner**.** They want to make that owner happy, and that’s their focus. If the owner doesn’t give a flip about design, it’s an uphill battle. If the owner cares about design and puts it out there, then most of the time, they say, “I’m doing what’s important for the owner, and that’s what’s important.**”**

I think there’s a lot of **[1:25:15 inaudible]** but also if you want them to acknowledge they care and the message they put out there, then I think the builder is going to respond to it.

**Speaker:** I think we as designers have to go through a paradigm shift to recognize that good contractors really do see the value in design, because it’s not like a public sector low-bid that they’re low and they can do whatever they want, and in the next job they just need to be low again. They need to bring value to owners, and they see the value in design. I think that’s why the good ones tend to win over and over again.

**Speaker:** If I were an architect – which I’m not – and I’m responding to an owner’s RFP that has 50% bridging documents and 60% price, how important is design? Not much, right? I think maybe we need a subset here of Design-Build done in a bridging and Design-Build done on a performance base. I see them out there, too.

If the design is pretty much locked down –I would agree with you, I’ve sat on enough of these source selection committees now – if the owners went through working with six, seven, eight months or longer with the programmer and his design criteria consultant, if you’re going to propose something different… Because chances are they’ve become wed – they’ve done two or three charrettes with that.

Although on the other hand, I’ve been involved with some who have been very good at giving the owner the wow factor. Sometimes, when we teach classes, we call it the bell tower. You look at it and find something else. Even though there were bridging documents, I’ve seen a winner based on a very creative, innovative solution within budget.

**Greg:** Is there conflict within this statement?

**Speaker:** Now it’s our job to balance what the owner wants and what the general contractor is asking for.

**Greg:**  I think you really have three masters here. The first master is the health, safety, and welfare of the public. The next is to do the best job you can for the owner within the limits of your contractual obligations. Is that a fair statement?

**Speaker:** I think that in a project where design is a big issue, you’ll see Design-Build teams coming in with a star architect**.**

**Speaker:** Yes, somebody showed me three different options at one time.

**Speaker:** That’s how important that design is in the project they’re pursuing. I don’t see a conflict here. I think that this is aligning the owner’s desires with a budget and bringing the best people to do the job. I don’t see a conflict.

**Greg:** Now, we get to go to “In Summary.” I think that these are most of the points we’ve tried to cover here. Right project delivery method, fair and equitable contracts, educated and trained team, mental shift from the adversarial relationship to the Design-Build, collaborative integrated, mitigating risk, and extensive owner involvement throughout the process.

**Speaker:** I used to do several workshops for AIA on the Design-Build Knowledge Community or something. That’s no longer in existence, right?

**Speaker:** The Design-Build Knowledge Community is now the Project Delivery Knowledge Community.

**Speaker:** Is there a formal training program that AIA provides, particularly to owners, on Design-Build? There used to be. I remember going all over, and there would be 140 architects in the room for some of those, standing room only, training. I haven’t seen much anymore.

**Greg:** Let me ask the crowd here. Should the AIA provide education to designers on Design-Build best practices?

**Participant:** I don’t know if the AIA should do it, but maybe the DBIA.

**Participant:** Or in combination.

**Greg:** Should the AIA/DBIA provide educational opportunities for owners on Design-Build best practices?

**Participants:** Yes.

**Greg:** This Craig’s owner’s guide of what not to do. If there are any here you want to pull out and emphasize… We’ve talked about most of these things. We also put together a list of Design-Build done wrong: picked the wrong team, managed it like a hard bid, or failed to manage the design process. I think that’s important.

I love this statement. “Nothing is as dangerous in architecture as dealing with separated problems.” The last question I have to ask you is, “Can you achieve design excellence with Design-Build?”

**Participants:** Yes, of course.

**Greg:** Then you can come to the next session where we’re going to actually talk about that.

If you have comments, send them in. The more feedback we get from the profession, the better we can refine the process and come up with that spot-on education. Thank you, and thank you to the panel.