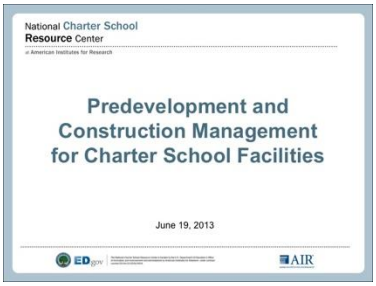
Predevelopment and Construction Management for Charter School Facilities

Part 1

TAMMIE KNIGHTS:
Good afternoon, everyone. My name is Tammie Knights from the National Charter School Resource Center, and I'm pleased to welcome you to the webinar *Predevelopment and Construction Management for Charter School Facilities.*



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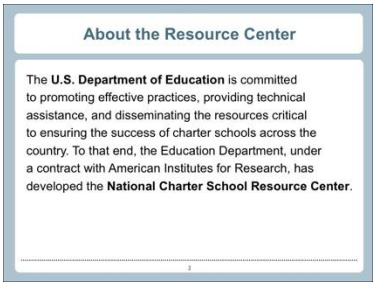

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The Resource Center is funded by the Department of Education's Charter Schools Program and serves as a national center to provide resources, information, and technical assistance to support the successful planning, authorizing, implementation, and sustainability of high-quality charter schools; to share evaluations on the effects of charter schools; and to disseminate information about successful practices in charter schools.

I want to quickly remind you about our webinar platform. You can listen to the audio portion either through your computer or over the phone. If you do join by phone, please mute your computer speakers to prevent an echo effect, and if you are not prompted to enter your phone number, please dial the number listed in the chat.

For each chat question you have, please enter them in the chat throughout the webinar. So you know, you'll find a copy of today's PowerPoint as well as another resource in the File Share located directly below the chat.

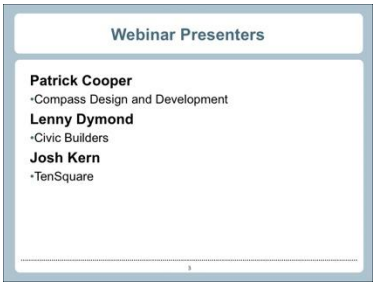
As a reminder, the webinar is being recorded, so to ensure audio quality, we have muted all of the participants, but as I said, please enter questions and comments in the chat, and we will either address them as we get the questions or during our Q&A portion at the end of the presentation.

And with that, I will turn it over to Josh Kern from TenSquare who will tell you more about our presentation today.

JOSH KERN:
Great, thank you so much, Tammie. Well, good afternoon, everybody. Thank you for joining us for this fourth and final webinar of a four-part series.

- The first webinar was about great spaces, where we illustrated some of the best practices for charter schools in designing and constructing their charter school buildings.
- The second webinar was on how to plan for your charter school facility project.
- The third webinar was around charter school facility financing.
- This fourth and final webinar is on, as Tammie said, predevelopment and construction management.

My name is Josh Kern, and I am a principal at TenSquare, which is a national organization that supports charter schools in their facility projects. With me today, I have Patrick Cooper and Lenny Dymond who will [now] introduce themselves.



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PATRICK COOPER:
Good afternoon, my name is Patrick Cooper. I'm with Compass Design and Development. Compass was founded in 2007 to provide viable design and construction solutions for projects in the Washington [, D.C.,] metropolitan area. We've been around for 15 years, and we specialize in addressing code, zoning, and entitlement and challenges.

LENNY DYMOND:
My name is Lenny Dymond; I'm with Civic Builders. We are a not-for-profit developer of charter schools out in New York City, and essentially we try and help charter schools so they

can continue to do their thing in educational schools; we help develop the schools themselves.

TAMMIE KNIGHTS:
And before we get started, I want to find out a little bit more about who's on the line, so I'm going to ask a few questions of you—if you could just answer them. [pause] Great, thank you; we're going onto the next question. [pause]

Thank you. [pause] Great; for this one, it looks like of our 47 participants, about 17 [percent] or 18 percent are in a stand-alone private space, about 39 percent are in a stand-alone public school space, about 22 percent of you are in a shared space, and about 20 percent are in a new space in development. So thank you and one more question. [pause]

Great, that was the last question of our 46 folks that are logged on so far, we [have] about 10 percent of you are in a new school in the planning phase, about 10 percent who are in a new school in an incubation space, about 57 percent who are not new but are looking for new and/or improved space, and about 24 who are in the middle of a construction project or building acquisition process.

Thank you for participating in those polls; that helps our panelists understand who our audience is as we deliver this presentation.

JOSH KERN:
Great; thank you. So [on to] today's agenda:

- First we want to cover predevelopment and the sources, uses, and pro forma tools that schools and the facility teams should be using during the predevelopment phase.
- Then we're going to be talking about creating a team—a team that's going to manage your facility project. We're going to talk about the roles and responsibilities of people on that team.

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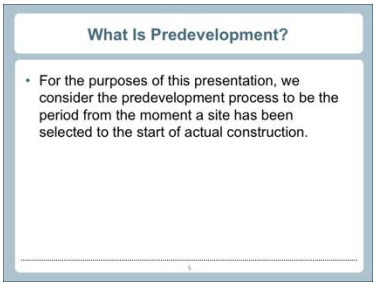
- Third, we're going to get into the issues of cost control, and we have some tools and checklists for you to use and download to help you with cost control in your project.
- Finally, we're going to go over construction management: some of the key elements and tools of managing your construction project.

So what is predevelopment? For the purposes of this presentation, we consider the predevelopment process to be the period from the moment a site has been selected to the start of actual construction.



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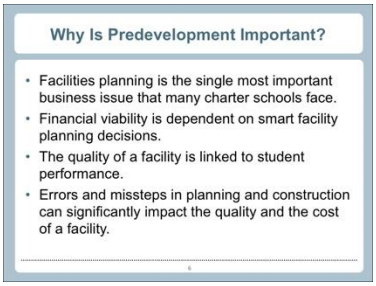
The period prior to predevelopment, we consider to be the planning process. Again, we had a webinar on the planning process, and that's on the National Charter [School] Resource Center site. So if you want to participate during that webinar, you can go to the National Charter School Resource Center site and look at that presentation.

And then, of course, the period after predevelopment is construction management, which we're also going to be covering during this webinar.

So why is predevelopment important? Well…



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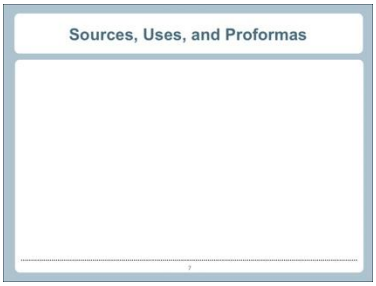
- First, facilities planning is the single most important business issue that your charter school is going to face. It is a very expensive and time-consuming process, and many charter schools don't have the human capital in-house to manage that project. So it's very important that the school put together a team that can help manage the process.
- Second, financial viability is dependent on smart facility planning decisions. Again, these are very expensive projects and should be managed well in order to avoid cost overruns.
- Third, and something we talked a lot about in planning, is that the quality of your facility is very

much linked to student performance. There is a lot of research out there that strongly suggests the linkage between your school's performance and the quality of your facility.

- Finally, errors and missteps in planning and construction can significantly impact the quality and cost of a facility.

So we hope to today help you avoid some of the mistakes that other charter schools have made and kind of keep you on the straight and narrow for best practices.

So now we're going to look at a school pro forma. This is important because this is one of the tools that you're going to be using throughout your predevelopment and construction management process to make sure that the facility project that you are designing for and building is one that you can afford.



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As you can see here—and this is available also on the File Share section of the website; you can view this and download it. But here's a pretty typical charter school pro forma; this is a school-operating pro forma. You can see in the first part, we have the income, and this includes all of your various sources of income for your school: your biggest sources, the money you get in local dollars for the students that you have. And then, of course, there's other state and federal dollars that you're eligible for. And then you'll see the lines 16 and 17, kind of other revenues or fundraising dollars.

In this pro forma, we have this kind of zeroed out; some charter schools are excellent at fundraising, but I zeroed it out here because a lot of times even if you think you can fundraise well for your facility project, a lot of times banks won't really count that because it's not guaranteed funding. So that's the income for your school.

And then as we go down the pro forma here, of course, now we're in the expense section, and as everyone who works

in a school knows, the biggest expense is salaries and, more specifically, salaries for instruction, instructional staff—teachers.

So we have those lines and then other costs associated with instruction, textbooks, [and] general supplies. Then further down on line 29, more salaries for administration and other staff.

And then as we scroll down, we start to get to line 58, which is your total expenses for the school, and then line 60, which is your net operating income, which is line 18, which is total income, minus line 58, total expenses. And before we get into your facility expense, this is your net income. And then from that income, we start deducting your facility expenses.

So here we have an example of school that pays rent, but this could just as easily be a line that's a mortgage payment, and it's not just because of your rent or your mortgage, we're also talking about all of your operating expenses, [which] would be included in your facility expenses. And you subtract your facility expenses, whether they be rent or mortgage or other operating expenses, from your net operating income, and you get to here—line 64—which we call the lease coverage ratio, but [it] could just as easily be called the debt service coverage ratio, if it's a mortgage and not a lease. This is the amount of money you have—how much your income exceeds your facility obligation.

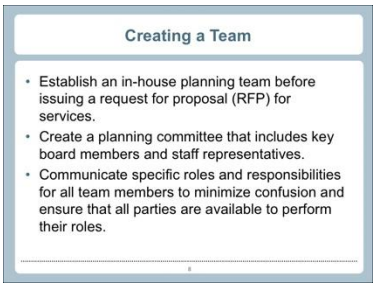
This is an important number; we talked a lot about this number in the last webinar when we talked about facility financing, and we had three lenders up here, because this is really getting—this is the number that really gives the lender an understanding of whether or not you can afford your facility project.

So this is a document—a spreadsheet—that if you're not already, you're going to want to be intimately familiar with;

you're going to have to understand your school's finances and your project finances in order to effectively manage your facility project. That's a big part as we go through the predevelopment and the construction management process but especially the predevelopment process, we need to make sure that we're designing and building a project that you can ultimately afford.

So with that…so now we're going to get into creating a team and we're going to turn it over to Lenny who's going to kind of walk us through the process of creating your facility project team.

LENNY DYMOND:
Okay, thank you, Josh. Once you've had your financing in place and you're ready to start the project, it's important to create a team that will effectively help you get to the point where you get your new facility. It's very important—it's crucial—because there's a lot of moving parts in developing a building, so you want to make sure that you're efficient with all your decisions and you streamline these decisions so you've don't hamper the project in little minor details.



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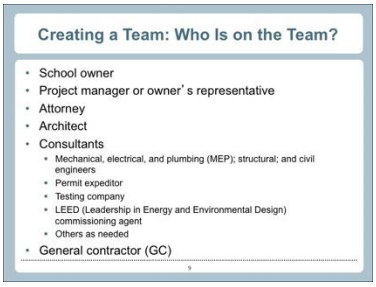
So that's why in creating a team, it's important to establish an in-house planning team before issuing a request for proposal [RFP] for services. Create a planning committee that includes key board members and staff representatives and communicates specific roles [and] responsibilities for all team members to minimize confusion and ensure all parties are available to perform their roles.

So creating teams: Who is on the team? I'm just going to go through these, and we'll briefly discuss the typical responsibilities of each one of these team members.



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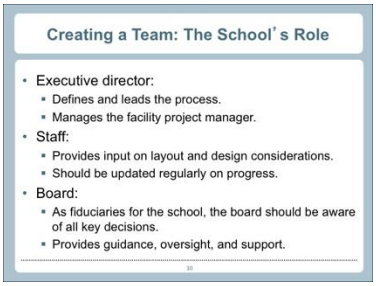
You have the school, obviously, you have a school—that's the purpose of what we're trying to do. You've got a project manager/owner's representative [rep]. Ideally, you'll have somebody in-house dedicated to this and have an owner's rep, such as myself also there to help along. You have your

attorney, architect, [and] consultants to get into a little detail and, ultimately, the general contractor [GC] who is the one that helped put the school together.

The school's role in this is obviously very important—it's the key member. You've got your executive director. Your executive director is responsible for managing all the different parts of the school's responsibility and putting it together—from land acquisition to leasing to essentially managing the project as a whole.



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Ideally, it'd be great if the school has a facility project manager; [I] cannot really express the amount of time that it takes and decisions. It's pretty much a full-time job even with the help of an owner's rep, so having somebody who can manage that and report to the executive director is very important.

JOSH KERN:
Can I chime in on this one point because this is a point that we actually raise in some previous webinars?

LENNY DYMOND:
Of course.

JOSH KERN:
That one of the first steps when you're creating your team, as Lenny pointed out, is you may have the person in-house who's going to manage your process, but you may actually have to shift that person's responsibilities a bit to free up that person's time. And that may include bringing additional, either shifting responsibilities in-house or either bring on additional support staff so that your lead in-house person really has the time that's necessary and dedicated to in-house managing this process.

LENNY DYMOND:
Absolutely, absolutely. Your staff: Your staff, obviously, is going to be busy doing their daily jobs as being educators, but their insight is pretty important to the design of the

building; obviously, you want the facility to have the school's vision, and there's no better way than the staff can help carry that. You also got to be able to filter the information you get from your staff because just like everybody is going to have their wants and needs and you need to make sure that you align those with the concept of the project.

The board: Of course, the board is the backbone of the school in most cases; they should be kept very up-to-date on the budget, schedule, because they are certainly going to want to know what's going on, and, of course, they'll provide you the guidance, oversight, and support that you need to have a successful building.

Owner's rep: this is another one—hopefully you can fit an owner's rep into your budget in addition to having a full-time staff member from the school. The owner's rep would also be—there's plenty of work to go around—the owner's rep will help basically weed through the issues with the [inaudible] general contractor and help put it in terms that the school could understand and help filter stuff that they need to deal with and basically support them to take a lot of the responsibilities away from the school to help them so they can do all their responsibilities as well. The owner's rep will take a significant burden off of the project for the school.

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Things that they do:

- **Coordinate all aspects for the project.** [This is] very big, but there [are] multiple facets that's going on, and the owner's rep will have done it before. We know basically what's very important and the timing, so we can help basically manage all different parts.
- **Manage the project team.** The project team would be made up of multiple people; talking more about managing the architect and the consultants and making sure that they meet their expectations, their

guidelines, their dates that they need to do stuff in order to continue to move the project along.

- **Oversees and maintains the project budget.** Obviously, it's another crucial aspect that we talked about. There's a lot of planning into the financial aspect of the budget. Obviously, there's no room for error.
- **Construction projects.** There are definitely shifts to the budget that are going to happen, whether it be change orders, whether it be other things that you need [or] contingencies from your architect. You need to manage these budget changes so you're able to implement them and maintain the budget because usually there's not very much room for error, and contingency is limited on these budgets.
- **Monitor the project schedule.** We'll talk about it more, but the project schedule is the lifeline of the project; you need to make sure that a schedule is clearly articulated at the beginning of the job. You create milestones and you work toward these milestones so you know if there's slippage in your schedule because that ultimately will affect the end date. And, again, typically, nine times out of 10 for the schools that I've worked with, they need to be in there on a set date, students are not going to wait, and it usually ends up being very close to the end when you're getting done, so you have to manage the schedule very closely.

JOSH KERN:
We have a project schedule in our planning webinar. I think it's in the File Share as well, so you can actually download that if you want to see an example of a project schedule.

LENNY DYMOND:
Terrific.

- You've got to keep a close eye on the quality of construction. This is just making sure that the project is being built to the contract documents and

specifications. It's very important to make sure that the quality is there because we all know that these schools can take a beating after a while.

- You got to just—this will happen—you'll use the architects and the other consultants; you'll have weekly meetings where you'll keep an eye on this. There's negotiating requests for change orders. Every project they start out with, they see there's no change order, and that's an impossible task. So you always need to maintain; you need to go through the change orders to make sure that they are acceptable and that they do not affect the schedule, and all the timing needs to be kept going.
- You've got to troubleshoot and work through challenges that arise during construction. This happens all the time. There's always going to be different challenges, and you need to basically prioritize which challenges need to be addressed now and which ones can wait and you can finish out another time to not affect the schedule.

The attorney's role: So you undoubtedly have an attorney onboard very early in the project. If you're lucky, you can get one pro-bono because a lot of times that's when they'll do their pro-bono work is for charter schools. In the beginning, they will be helping you execute your acquisition. If you're leasing a new building, they will help you with your lease that you're going to be working through. They will create license agreements with neighboring properties.

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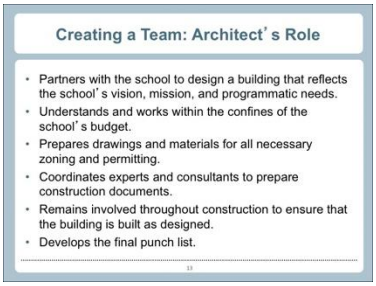
We do all our work in urban areas, and typically there are neighboring properties right next door where you need to work above, we need to work on top of, we need to protect them, [and] we like to be nice to our neighbors. It helps out for a healthy relationship. But, of course, these are agreements that are signed so that the neighbors know that if there is any damage or anything done to their properties, they'll be taken care of, and it's just something that needs to get taken care of. Your [attorney] will help develop and

negotiate RPs [requests for proposals] and help you with the contracts for the architects, consultants, and ultimately the general contractor who is usually—typically—the most difficult contract to get through; there's a lot of going back and forth. So your attorney will help streamline that process.

And they're going to work through any project-specific legal issues; hopefully they don't come up, but we've always had issues that come whether it be an injury on a project; whether it be a labor dispute. I've sat in [a] lawyer's office dealing with extension of time claims by the general contractor who is—because they usually—sometimes they have liquidated damages to try and force a schedule being done at a certain time. So you've always got to be careful, and you need to keep your attorney close because these things do come up.

The architect's role: [The architect] partners with the school to design a building that looks like the school's vision, mission, and programmatic needs. Again, there will be early stages of the architect's involvement. He will meet with the school; he will meet with the staff—that's whoever you choose—to just basically get an idea of what the flow of the school is and what kind of your vision and how you'd like the school to look, and that they will design and work through it. There will be a number of meetings that develop essentially what the school is going to look like at the end of the day.



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You will work through the budget with them, so they have an idea of where they are building to and where they're designing to, rather. There will be numerous stages with this as well. You'll be value engineering [VE] with them to try and make sure you work within a budget, but you need to be upfront with the architects so that they know their budget so they kind of know where they can work from.

They will prepare drawings, materials necessary for zoning and permitting. Depending on where you are, each

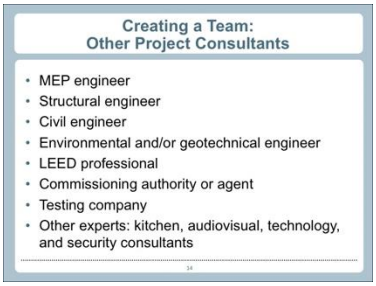
municipality has different guidelines for what they need to approve to basically sign off the construction. Your architect should be an expert in that and they should help guide you through the process and what it takes to take care of all the zoning and permitting.

They will coordinate their expert consultants to prepare the construction documents. There will be a multitude of consultants: mechanical, plumbing engineers; there will be civil engineers; there will be specific guides for kitchen. They know who they need to reach out to, and it's up to them and it's their responsibility to make sure that all these different principals give their input to the project to develop your construction documents that you're going to use to build.

They will remain involved; they will essentially be the school's right hand in the construction as well. They will be the ones at the meetings with you; they will be answering the questions to the general contractor, and they will also with the owner's rep be going through to make sure that the building is being built to the construction documents and the specifications are being followed. They will [ap]prove all materials that are being used, so they will be there through the entire process. They will develop the final punch list, which they will basically do to tell the contractor what still needs to be completed; they will help follow through on that. They will basically approve all the close-out documents as well.

The architect is crucial. You want to make sure that you're very comfortable with them; it's going to be a—you're going to be with them as long as everybody else on the project, so you want to make sure you're comfortable with your architect.

There will be a lot of other project consultants that you will have throughout the project, and this list can expand, but we just touched on a bunch here. And, again, these guys will typically be…the architect will typically tell you who you need and will help guide the process. More often than not, a majority of these guys will be carried under the architect's contract, so you do not need to worry about having individual contracts for each one.



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For example, the MEP; this is your mechanical electrical plumbing engineer. Again, that is coordinated with the architect; they're the ones that basically put everything—the infrastructure—together for your plumbing, for your electrical, and they do work with the architect so they can basically produce a set of documents that are buildable, and the architect again should be telling them the budget so they'll know where they're designing to.

Structural engineer is another one that will be through the [architect]. They will be responsible for putting [up] the building. If it's a new building, obviously, there's something to hold it up; even existing buildings, if you're putting a new door in, something to that extent, [a] structural engineer usually needs to be onboard.

Civil engineer: In New York, we have a civil engineer that deals with our plumbing, our sewer connections. It deals with any sidewalk work that we have to do.

You have [the] environmental geotechnical engineer who will be the one that tells them how they're going to build their foundation, what kind of soil conditions that they have.

If you so choose, you'll have a LEED [Leadership in Energy and Environmental Design] professional if you feel like going green and you want to use a LEED [professional], which is going green—that's another professional that you have.

You have a commissioning agent. Your commissioning agent is somebody else who—this person may be

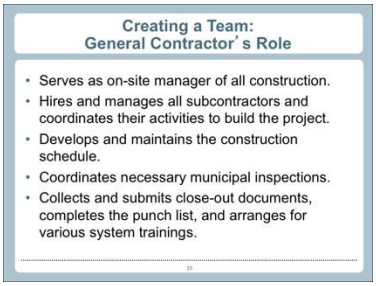
[inaudible] control; they come in and test out your systems to make sure that before you walked by that everything is working as designed. It's not necessary, but we find it very useful.

Testing companies: In New York, you have to basically have a certified engineer sign off all of your concrete, your fire stopping, which is just making sure that there's a stoppage of fire between the buildings. This is something that you'll have to usually go to the owner; it's something that somebody else that you'll have to have onboard.

And there'll be a bunch of other consultants that you may or may not need; your architect will help you. If you have a kitchen, you'll have a kitchen consultant that will help tell you what equipment you need there to have an operational kitchen, depending on your needs.

If you want to have an advanced audiovisual system, you may want one to put that together. Security, depending on where you are, if you want to have a security system. These are other consultants.

And then ultimately you have the general contractor; this is the one person at the end of the day you want to try to feel comfortable with. There's going to good times and bad times. They are going to be serving as your on-site manager of all construction. They will be essentially hiring all the subcontractors [subs], coordinating their efforts to building the building. They will be maintaining and developing the construction schedule; this is something you always need to stay on top of because schedules always slip, and you just need to make sure they don't slip enough where they can't recover.



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They will coordinate necessary municipal inspections; this is crucial also. They are inspections that need to happen at certain times, so you can work toward getting a certificate of occupancy so you can occupy your building. And they'll be responsible for closing out the project, providing your staff

with all the training that they will need to operate the building at the end of the day.

PATRICK COOPER:
Thanks, Lenny. I want to take some time to speak about controlling costs. In addition to the predevelopment process, there are certain activities that you'll conduct—planning, programming. The cost control should be a primary focus during that phase.

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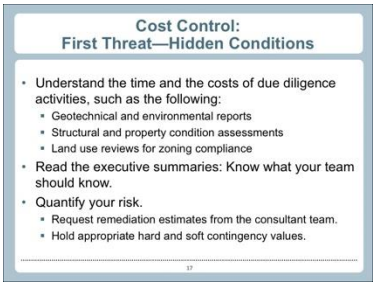
If you're trying to protect your project costs, it's important to identify that there are three threats—three areas that threats can come from: hidden conditions, drawing omissions, and owner decisions. And I'd like to take a moment to discuss some of those threats and how we might address them.



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The first threat—hidden conditions—can come from anywhere. But it's up to you—the owner—to set the tone and prepare your team to ensure that they have the adequate tools to address these threats. These tools are procured through due diligence activities. It's important to budget for these activities, to plan for them accordingly, and to make sure that your schedule can accommodate these activities as well.

The geotechnical and environmental reports: These reports—Lenny touched upon them—but these reports basically speak to the conditions of your soil. They take some time to procure.

In [Washington,] D.C., where I am, the geotechnical permits can take up to two to three weeks, and the reports can take another two to three weeks to be completed.

The environmental Phase I and Phase II: The Phase I just basically lists the histories of your project and the adjacent properties and basically gives you an indication as to whether or not you have some environmental concerns on your property.

The structural and property condition assessments: These are important, especially if you have an existing building. These people go in: They take a look around; they take pictures; they assess the condition of the steel, the concrete, the flooring materials, the substrate; and they'll give you a genuine, just detailed report that will tell you what issues you need to look out for.

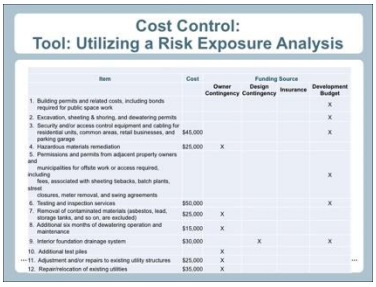
In your land-use reviews for building compliance, it'd be good to get a good indication from a land-use attorney just what type of height, density, [and] setbacks you might need to comply with [on] an existing building, or if you're looking at expanding your building into another structure.

It's important that you read the executive summaries. These reports are going to be detailed; there's going to be a wealth of pages, but at least you need to know what your team should know. The executive summaries are one or two pages; they'll give you the bottom line.

And at the end of this, you need to quantify your risk. It's important that you seek assistance from your consultant team, have them review your reports, and these consultants—we're talking about the environmental, the geotech[nical], they can give you an assessment on what it will cost to remediate your soil, to what kind of structure you might need to support your building. The civil engineer will tell you if you're tying in your waterline to an older main—water main; you may need to replace the entire main in [Washington,] D.C.[,] for a certain distance, and these are unprecedented, unbudgeted costs unless you do the right due diligence.

It's important that you hold the appropriate hard and soft cost contingencies, and a rule of thumb when starting a project and beginning your budgeting is 10 percent. The reality is, certainly as you work through the project and assess your risk, that percentage may decline, but just as a starting point, it's good to start with good touchdowns.

The next slide is a risk exposure analysis, and basically I've shown this slide just to kind of give you a hint of how you can use these reports and the expertise and the input from your consultants to assess just what your risk might be.



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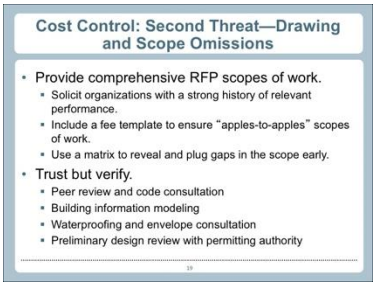
For example, you could use your permit expeditor, for number one, and they can give you indications as to what permits you might need, what reviews, what agency reviews you may need to go through: historic, Council of Fine Arts in [Washington,] D.C., if you have an existing building or if you're building against park land. And certainly number 4, hazardous material remediation: Your environmental consultants can certainly give you an indication as to the quantity and the extent of remediation required, and certainly the timing that will be required to work with the agencies.

In Washington, D.C., we have to work through with the [District] Department of the Environment [DDOE], and many times if your soil comes back and it's been contaminated and there's a history, or if your site is the origin of the contamination, you'll need to produce a corrective action plan with DDOE, and that's the [District] Department of [the] Environment, and those more plans take months to negotiate and to execute.

Other items, such as the last one, number 12, repair of existing utilities: Again, your civil engineer can help you assess just what the age and date of your existing infrastructure is, what you'll be tying into, and whether that line seems open to replacement by the administration, the district administration.

The second threat comes from drawing and scope omissions. I'm a project manager, but I'm also a registered architect, and I can tell you that I don't believe there's ever been any history of a perfect set of design documents, but there's nothing that will keep you from trying to meet that goal, and if you were to try, it all starts with a comprehensive RFP. You have to work with your experts, your architect, and some of your owner's rep to establish just what your scope of work might be for the project. It's important that you solicit organizations with a strong history of relevant performance. By relevant performance, I mean, if you have an existing structure, hopefully your architect has experience with those types of facilities. If it's ground up construction or if it's urban infill, hopefully they have experience with those. Certainly educational facilities would be paramount; they have to have that experience as well.



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Include a fee template to ensure you have an apples-to-apples scope. The next slide, I believe, will show you a sample fee template, and we'll walk through how that can be advantageous.

It's important to use a matrix to plug and reveal gaps in your scope. This last main bullet is trust but verify. It's so important that you not feel that your team is your last resource. No architect will feel slighted if you reach out to other specialists to help confirm that your documents are as comprehensive as they can be. There's measures that you can take such as peer review and code consultation.

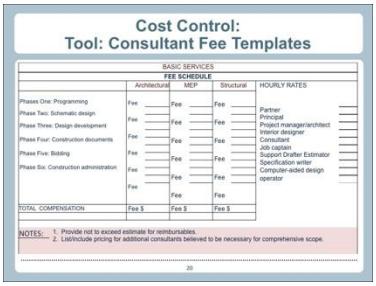
Again, these items take time, and you need to budget and accommodate time for them in the schedule, but certainly they produce fruit.

Building information modeling: This is when you take your building and put it into three dimensions just to confirm that you do not have conflicts with a duct going through an elevator shaft, things that will just bite you in the field, and waterproofing and envelope consultation. You know, water is a building's primary enemy; these consultants are just

pennies for the dollar for the expense and the talent and the expertise that they bring to your team. The wealth that they pay off, you can't even measure it; that review is time well spent.

And then also I suggest you take advantage of your municipal permitting authority. Many times, they have an ambassador program or they have a preliminary design review that they'll conduct with you. It gives your architect a chance to ask whatever questions that they might have on codes. If you have some nuance like distance for egress or whether your elevator needs a generator, for example, they can help answer those questions and give you the certainty that you need that you designed this into your program, and it's not something that you have to respond to during the permitting exercise.

This next slide is a consultant fee template, and basically it just ensures…if you provide this template with your RFP to your individual architects, the civil engineers, basically this fee will ensure that you have an apples-to-apples comparison. It will help you identify if you have any omissions in scope, and it will help you to ensure that everyone's pricing to phases as you see fit.



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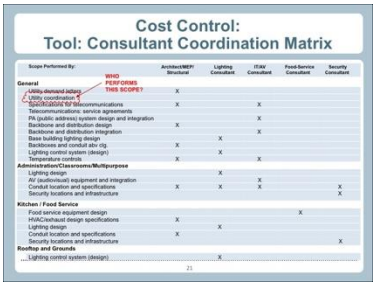
Many architects—good consultants—will tell you where they feel you need to supplement the program and where additional services are warranted. It also provides an opportunity for the consultant to give you their hourly rates and hourly costs. Also for cost planning or cash planning, it will let you see just when these invoices might be issued during the predevelopment phase. Many times during the predevelopment phase, procuring financing for those early phases is sometimes difficult; so it's important to have a cash flow and plan accordingly.

This slide is a consultant coordination matrix, and basically it just helps you to ensure that you have a comprehensive scope, and you have members of your team that can help you administer that scope.



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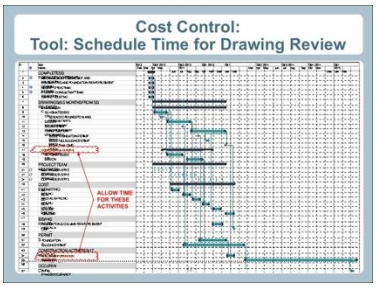
The matrix, basically, if you take the program and the activities that you feel need to be conducted to complete your project, and you take the team members that you currently have, and if you map out all of those activities, putting an X or check by the people responsible, it helps you identify if you have any omissions in scope or if you have any redundancies.

Redundancies are fine as long as you acknowledge them and they're sanctioned, but certainly omissions in scope need to be addressed early on, and so you need to just procure the additional specialized expertise to assist with this.

And the highlight here—the bubbled area that I have—is—basically—I'm just showing how utility coordination is one scope of work that was unaddressed. Who performs this scope? So a utility consultant is often used in Washington, D.C., and Maryland to help you navigate those municipalities to provide power to your project in a timely fashion.

The schedule that Josh spoke to and Lenny spoke to in his presentation as well—this is just a sample. And, really, certainly, we're all familiar with schedules and the need for them and how they help to keep a project on track, but it's important that for each of your project meetings, you revisit the schedule—the original schedule—and you project where you are now and that it's updated. It should be a tool, though, it should be a guide, and it shouldn't be updated easily. A question should be asked as to why or what's affecting us or what's keeping us from tracking successfully. But it's also important to be realistic with your schedule. There's certain activities—these risk assessments, these due diligence activities—that are important to be built into the schedule.



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Allow yourself time to conduct these activities. I often see project schedules that include pricing exercises within them, but I don't always see the time that's needed to review the pricing exercise, to sit down and conduct a page turner, or if you had a peer review on the project, it's important that you reserve the time to have a page turner for that peer review architect to come in and give you the comments in real-time with your team to address any questions and to respond to those questions. If you don't build in that time, your schedule will just be a cartoon, and that's the last thing you want. You want a tool that you can use and that will administer the project and help you to maintain your goals and objectives.

The third threat is from an unlikely source—owner decisions. We all know owners do not make decisions outside the program, but the reality is that sometimes they do. It's important that we all have the team, including the owner, programming restraint.

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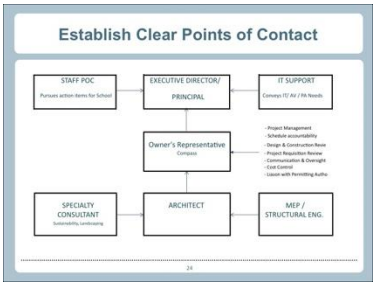
Lenny spoke to soliciting members of the staff that can help you address the questions and maintain and produce the program. It's important to separate wants from needs, but I just add here that certainly key staff members—principals, teachers, IT [information technology], administration, and maintenance facility people—those are individuals that will need to be solicited; they'll need to produce a list of wants and needs and separate between the two.

If the budget is flush, you can include some wants, but more than often, you'll have to just maintain and administer the needs of the building.

It's important to also adhere to your long-term goals. You don't want to design a building that speaks to your current curriculum or your current program. You just want to design for the future and make sure that the building can accommodate that.

It's important to communicate with the design team. If you, as the owner, communicate from day one that we're designing to cost, as a matter of fact, you can put this information in your architect's agreement and charge them to design to cost. And if you communicate that you want to create constructible, affordable, and sustainable architecture, I think the matrix will trickle down, certainly if you are disciplined and have restraint and just maintain that message.



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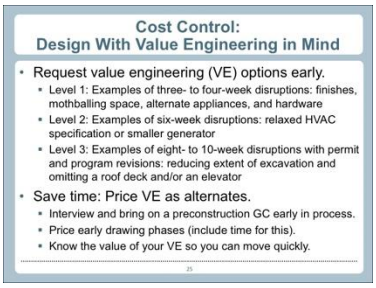
It's important to also have clear lines of communication; definitely keep points of contact with these folks at work. Lenny spoke about designating a staff member, and Josh also spoke about making sure this person has the adequate time to perform this role. Again, Lenny also spoke about having an owner's rep or a project manager. If you have that individual that is their full-time job to take the calls, respond to e-mails, conduct the due diligence, read the reports, and just deliver a clear concise message to the team, it's time well spent, it's money well spent, and it makes for a successful project…

Part 2

PATRICK COOPER:
…and preserve the vision. And also the owner's rep is charged with maintaining cost, schedule, quality, and overall performance of the building.

This slide basically speaks to value engineering in mind; it seems like a dirty word, VE, but the reality is you're going to do it on every project. You need to plan for it, and if you plan for it often and early, it will just help you to ensure success.



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There's three different levels of value engineering as I see it with my experience. Basically, a level one: I see this as low-

hanging fruit, you know, these are three-to-four-week disruptions. If you get the pricing in and it's too high, if you need to change the finishes or the tactile surfaces of a building—the carpet, the paint—these are just changes to a finish schedule. Certainly it's a little bit more complex if you have LEED criteria to adhere to. If you have to mothball a space, meaning if you have to take that storage room or that breakout room or that conference room and kind of mothball it for the future or choose an ultimate appliance or hardware, these are easy to grab; they're easy to pull the trigger on, and they're less disruptive than some of the other ones.

Level two value engineering: This is basically changing the specification on some of your engineered product. For example, going with a less expensive HVAC system—heating and cooling system—or choosing an elevator that doesn't have the speed of the one that you might have specified, or maybe a smaller generator that doesn't operate the school in a brownout or a blackout but certainly just allows the life-safety components to resume until everyone has vacated the building.

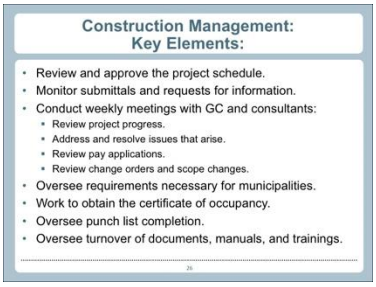
These disruptions could be a six-week period. It takes time for your engineers to redesign, to confirm that the product can fit in the existing plans and can be accommodated by the infrastructure—the utility infrastructure—needed.

The level three of value engineering: This disruption, I've listed it here as eight to 10 weeks, but the reality is it really could be longer or it could be shorter, depending on what you've chosen. Basically these disruptions are pretty major because typically they involve permit revisions and programmatic revisions, which are very hard to swallow. Sometimes with an executive director, there's a board that will have to be brought in for those kinds of decisions. But an example of this would be possibly removing the basement from a new building or omitting a green roof or an elevator, if the elevator is a luxury and not a life-safety requirement.

It's important that you save time and price the VE as alternates. When I mentioned that you provide these options early, I'm talking about while you're designing; there's no need to be responsive or reactive. You can bring on a preconstruction GC early in the process before your schematic documents are complete and have them participate, have them price the VE offer—excuse me, alternates. Have your architects offer these options and just have them list them when you have—when you issue the design documents, have them issue these VE alternates as just an a la cart list of activities that we can pull if the project is over budget.

I mentioned that it's important to price them in the early phases, include time for this on your schedule, and just…it allows you to know the value of your VE so you can move quickly and just be very agile in the process.

LENNY DYMOND:
Okay, thanks, Patrick. Right now, I'm just going to briefly talk about a few elements that will be helpful [for] you to know during construction management. These are things that we run across every day and issues that I believe will help you ask the right questions to hopefully [build] a successful project.



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We've talked about it a lot—and we can't emphasize enough—to review and approve the project schedule. Again, [the] lifeline for the project would be the schedule. It gives you the pulse; it knows you where you are. What you really need to do with the GC is—they will do it—is to establish milestones in the contract. These are points where a critical path is—what we call it—and these are just things that have to happen, and you need to just make sure everything that can happen is happening to reach these milestones.

This way you can identify where the problems are and what can be done to correct them. On many jobs, you'll have what is called a recovery schedule. We ask for manpower-

loaded schedules, which tell you how much manpower [is needed] to achieve certain tasks can be done, and all these things can be done. And you put overtime, again, to make sure you reach the end point, which is your ultimate goal.

Another crucial construction/management tool, we'll call it, is the submittal process. I can't emphasize enough the submittals are essentially everything that the GC provides the architect for approval that they're going to put in the building. This is crucial because these are the things you need to build with, so if they're not there, you can't build it and that becomes a problem. These products will be given to the architect; your GC should provide a schedule of when he will provide this so not to bog down the architect and also make sure that you're submitting what needs to be submitted at a certain time.

What you can do is to make sure that you set the expectations of the architect for these submittals—one- to two-week turnaround—so that they review them and send them back so there's enough time in case there was something wrong—if [, for example,] they didn't submit the right material—that they can [correct]. Essentially once you have this and they're approved, you want to know the lead item; it's a long lead list that you can get from this, so you know when the marker boards are going to be on this site, you know, when certain aspects or whatever it is, electrical equipment, is going to be there.

Another thing that's going to happen and you need to monitor and you'll have involvement in this is request for information. As Patrick alluded to, there's no such thing as a perfect set of construction drawings; there will be conflicts that weren't picked up, and hopefully they'll be picked up early enough by the general contractor, and they'll raise their hand and they'll say we have a question—is it A or is it B? It usually very simply it's A or B, and you can find out, but sometimes you'll have to go back and those decisions have to be made. So you'll monitor these things; usually we have a [inaudible] it's called, which will essentially know that

there's a question out there, if it's open and how long it's been open, so you can make sure it gets closed.

You can manage all these things. You'll have weekly meetings with the GC consultants and whether it's the point person from the school during these meetings, you will review the project—the progress of the project. You'll walk through the schedule; you'll make sure everything is there. You'll walk through the job and just see if everything is—what's coming together—if there's any questions.

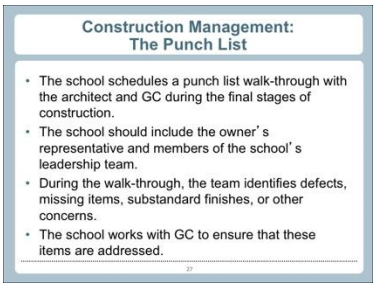
One thing that we like to have the general contractor put together is a two-week look ahead, which tells us, all right, so over the next two weeks this is what you expect to see. It helps you see how things are going to progress, and it also tells you if something wasn't done last week and then you can go into the discussion of why that didn't happen.

During these meetings, there will be tons of issues that arise during construction, and this will help you basically make sure you filter these and get answers. There will undoubtedly be a bank involved, and there's a lot of fiduciary responsibilities, so you can review the pay applications. I'm sure there'll be a bank engineer who's going to come and take a look and make sure what's being built is actually what's done. And then during these meetings, there will be change orders, scope changes, because there's no better way to do it than when everybody's in the same room.

Other elements is [to] oversee the requirements necessary for your municipality. And by this I'm also talking about obtain the certificate of occupancy. At the end of the day, I'm pretty sure no matter where you're building this school, you're going to need a TCO [temporary certificate of occupancy] to get in there, it's certificate of occupancy. And they are usually a very daunting task; it's never too early to start working through the issues. You'll have an expeditor onboard who will help you and tell you what needs to be done. And with the help of everybody, you're going to need

to start sitting on top of that because you don't want to get caught having [to] open up the school on September 1st and nowhere near getting a TCO by the beginning of August because you'll undoubtedly have a problem.

You will oversee the punch list, which we'll talk about more. We can go onto the next slide because we have the punch list. Now this is a…towards completion of the project, the school's going to schedule a punch list walkthrough, and ultimately at this point, they're going to go and take a look and make sure everything was built, and if not, they're going to identify all the little things that are not up to snuff and not up to exactly what the architect envisioned. You want to make sure that you leave enough time to do this work before the school is opened because it's a lot easier to get done when no one's occupying the building, otherwise the GC is going to have to come in after hours, weekends, when the school's not in operation, and it can just get very frustrating. By that point in the project, everybody wants to be completed, so you want to make sure you leave enough time so you can again complete that.



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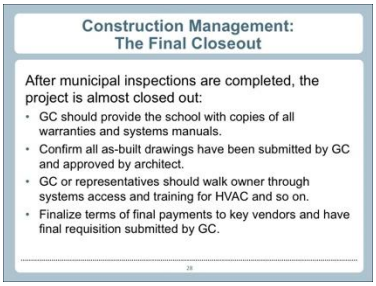
Now who does the punch list is typically the architect. Now it's helpful to have other people walk, but you've got to be careful because you got to filter the amount of information that comes back and the punch list. Because by the end of the project, there will be certain things that you can just not get out of the GC, just simply it just cannot get done, and there's a fine line of when you're signing off a punch list and who gives their input because it can get very confusing. And then you just want to make sure that these things all get done.

We can move onto the next slide: the final closeout. After you have your TCO, there is a lot of other documents; you're almost done, but you still have other things. There's going to be a lot of training involved that the GC is going to be required to do, the specifications, and make sure that the building engineer or whoever runs the building actually knows how to use all the systems. There's going to be a multitude of warranties and guarantees that you're going to be owed through the specifications.



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Typically what we do is the architect monitors the approval of these, so you get all the letters, know the warranties, to make sure you have everything so that if there's any problems, you can resort back to this to rectify any situations that may occur shortly after your facility is opened.

And then the last point I just want to make is you finalize the terms and the final payments so the key vendors and the final requisition by the GC. This is something that's going to be negotiation going on four, five, six months after the project, and the quicker you do it, the better, but this is where you finally get all your numbers and everything, and that could be one of the most daunting tasks at the end of the project.

JOSH KERN:
Great; thank you, Lenny and Patrick. We covered a lot of material; we're now into the question-and-answer phase of the webinar. So with that I want to turn it over to you to try and answer your questions as best we can.

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FEMALE SPEAKER:
I'd like to remind you all if you have questions, please type them into the chat feature on your screen, and I will read some questions that have come up during the presentation.

First I'd like to start, if you could talk through some ideas on selection criteria for when you're selecting your team of external professionals and consultants. What kind of experiences and skills do you look for?

JOSH KERN:
That's great.

PATRICK COOPER:
You know, I briefly spoke to this, and I can expand on it. Certainly it's important to make sure your team has relevant experience in the subject matter of the product that they're designing.

If it's new construction, hopefully they've done a wealth of new construction in the jurisdiction that you're planning to build your building. If it's existing construction only, they have experience with existing buildings or with historic buildings. And if they have that experience, ideally they have experience with the historic municipality, and they can conform to those guidelines.

It's important that you ensure that your team has the relevant experience—that they have the tenure and the expertise—and it's important to meet with them in advance. Certainly there's nothing that can compare to just the gut feeling that you get and the confidence that you get from your interview, from your selection criteria, and from questions and answers in real time.

LENNY DYMOND:
Yeah, I was going to say that usually you'll go through an interview process and that is, I mean, obviously you're going to get a list of all their experience in other projects that they've done—similar to the nature of the one you're doing. But having the interview with them and just kind of understanding how they go about doing their business and just having a comfort level with them is probably just as important as anything else.

JOSH KERN:
Yeah and a few more points. One, definitely check references, not just the references that they give you, but, I mean, I would call as many of their representatives from their past products as possible because you'll learn a lot about what their likely performance will be on your project based on their performance from previous projects.

Also, some of these large companies, architectural companies and general contracting companies, you know, it's really kind of person specific, so you want to get some clarity around who's going to be the person from that company that's going to be working on your project. You know, at a large architectural firm, some of the architects are great, and some of the architects are less great, so you want to know kind of who the team lead is going to be from the architectural company and from the general contractor.

LENNY DYMOND:
For the general contractors, when we do interviews, we request that they actually bring the team that they're proposing to you so we can meet that team to help us make our selection because we think that's important [and] because, again, that's the [inaudible] done on a day-to-day basis.

PATRICK COOPER:
I would just add that in the reference, when you're checking references, it's important to ask the right questions. And one question that you can ask is, "How does the architect perform on a critical path schedule?" or "How are they with changes? Do you get a lot of additional services, were there a lot of complaints, how were the design details after the fact while your building's in operation?" So just ask the right questions. You have a finite budget. And the last thing you need is a slew of additional services for petty items.

JOSH KERN:
And there's one more thing—this was brought up in a previous webinar, but I think it's worth repeating. We talked

a little bit about cases where a school might have a friend who's an architect or a friend who's a general contractor, you know, someone on the board who's a lawyer but not necessarily a real-estate attorney, but they want to help. And you know—

LENNY DYMOND:
Because [inaudible] with family; right?

JOSH KERN:
Right. [laughs] And so the advice that we kind of give to the schools is that you really want to work with dedicated people who have real expertise in this specific area. And even if you have to pay for that service, that is money well spent as opposed to getting kind of free service that may not be—where their area of expertise may not exactly be in this area, or that they really don't have the time to dedicate toward the project.

LENNY DYMOND:
Excellent advice.

FEMALE SPEAKER:
That brings us to another question about the types of designing those contracts and if you can talk about your experience and your opinions you might have on contracts with design and build together versus a more traditional contract with design, bid, then build.

LENNY DYMOND:
Well, typically, before I was working with Civic Builders, I was with a private general contractor, and then we did a lot more design build. But, again, they were not as schedule driven as these are. There may be some circumstances—the design build is a little dangerous in terms of your budget—you know where you're going to but you have to have not a large contingency because you're kind of designing—it's just that. The other way is just a little bit more systematic I would think in terms of a school construction. I think you would want to have everything

laid out first before you went ahead and just started going out on a limb sort of when the time build ends up turning into.

JOSH KERN:
Well, what are the advantages that you found of design build? So you got to the advantage of design bid build is potentially a more competitive pricing, like you say, a more systematic process. What are the advantages of design build from your experience as a general contractor?

LENNY DYMOND:
Well, design build, I mean, it could get done a little quicker; you're going to cut out a lot of the design process, but in that respect, there's also mistakes can be made, which can also cause your budget to sort of creep out a little bit because you can't control the cost because you may not realize it now after you've already pumped a ton of money into it.

Schedule-wise, it could maybe help you. I just think that in this situation, it's just a little bit more going; it's a little more cowboyish, I guess, sort of speaking, in terms of on a tight budget.

PATRICK COOPER:
I would agree, and I would say [the] advantages to a design build process would be as your designer and your builder are one and the same, that you preserve the design intent. There's probably no ambiguity as to what's been designed and what's going to be built; it's probably a clear message.

With the design bid build, it's important that you understand that all of these people that you've brought onto your team—your consultants, your contractors, you're advocates—they're advocates, and it's good to have some checks and balances. It's good for your contractor—another set of eyes—to review the design documents and to help determine if they're equitable. And it's also good for your architect to review any change orders or pricing offered by

your contractor to ensure, again, that it's equitable and that it's warranted.

Without that checks-and-balance system, you're left to the discretion of the design builder, and, again, there's a lot of really excellent ethical design builders. But I would say my preference would be and conventional wisdom in this area is design, bid, and build.

JOSH KERN:
Just before we go onto the next question, I just want to make sure that everyone who is participating in the webinar understands, on a design build, the general contractor has the contract with the architect, not the owner, not the school, whereas in a design bid build, the contract for both the architect and the contractor—the general contractor—are with the school—right?

LENNY DYMOND:
Correct.

FEMALE SPEAKER:
In this presentation, you talked a bit about designing for the future and incorporating flexibility, and that concept has come up in many of the webinars and comes up often with schools. Could you talk about some examples that you see with schools design spaces that will suit them [inaudible] over the long haul into the future—some examples of designing for the future and flexibility?

PATRICK COOPER:
Sure, absolutely. I think it all starts to me—this is just kind of one—I'll speak to one area with that, but it starts with me with the infrastructure, making sure your utility and your systems—mechanical and utility infrastructure—can accommodate an expansion of space. There's nothing worse to find out that you need more space; you have the land to build and you have the space that you can take on, but you don't have the amperage on your electrical panel to accommodate any future expansion; so if you have the

opportunity and you have the funds and you have the team, it's best to make sure that you have the electrical, utility, and mechanical infrastructure to accommodate future expansion.

LENNY DYMOND:
Yeah, about the only thing would be audiovisual, something that's design for the future; I mean, it's—and unfortunately more often than not, I haven't really seen too many examples of it because they're too busy trying just to get as much as they want into their budget. So trying to design for the future, I know it sounds great, it usually doesn't end up falling into the project, at least not ones that I've been involved with at this point.

JOSH KERN:
And the first one, we did great spaces. I think we did a pretty good job of illustrating some of that and also kind of emerging practices and space design. I would encourage people to go back and look at the first webinar—the great spaces—to get some ideas about both good design ideas and also flexible design ideas.

FEMALE SPEAKER:
That brings us to another question about flexibility, in both urban and rural school settings, we see schools that have tight budgets and tight space, and they often also are using physical space for many different purposes. Can you talk about some best practices there, some good examples you see for using flexible, multipurpose space?

LENNY DYMOND:
Yeah. As we talked about earlier, we've coined a couple of phrases, the gymnatorium or the—which is basically the gym that turns into the auditorium or the cafeteria. It's called the multipurpose space, and, yeah, they usually want to have more space for the programmatic needs of classrooms; in other words, the multipurpose room turns into the next best thing, which is the gym. Sometimes it's the gym, the cafeteria, and the auditorium all in one, and it

seems to work. I haven't really seen any problems. I mean, some schools are lucky enough to have their own dedicated gym, but more often than not, they end up being shared space just because they want to…space constraints…but also trying to get as many for expansion of classrooms as possible.

PATRICK COOPER:
Absolutely, and some of these larger spaces like the gym or the auditorium, if they can be designed with movable partitions—some way that you can segregate the space and isolate it, you know, cubbies that are portable and movable. It would just help you in that flexible criteria.

FEMALE SPEAKER:
Great. We have a question that has just come in—shifting gears a bit. Can you talk about some elements of construction cost—questions on soft costs often come up. But do you have a sense of what soft costs would be like throughout all stages of the project and are there any universal guidelines or expectations around soft costs in the industry?

PATRICK COOPER:
You know, I'll jump in here, and I'm sure my compadres can complement and supplement. You know, I hear a lot, and the practice that I've seen is that if you can quantify your hard costs, and hard costs are typically your construction costs—anything with your general contractor. I think we quantify those costs, that your soft costs are typically 20 percent of your hard costs. It's not an exact science, and every project has its nuance, and then there's contingency to contend with.

If you have an existing building, you might think that you might have a reduced contingency, but the reality is an existing building could be very…have a lot of pitfalls as well or challenges, so that's just one rule of thumb.

But, obviously, the level of consultant interface—the team that you might need on any project—it could be all over the place; it really depends on your location and your circumstance, so 20 percent is what I might offer as a placeholder until you do the due diligence.

But I will add that it's very important as you budget and as you create your budget to underwrite your budget, to solicit or submit RFPs—sorry, issue RFPs—to get prices back and populate your budget with real-time information because there's nothing worse than getting down to closing and you have not solicited proposals, and you really don't know what your exposure is for your consultant team or your soft cost.

LENNY DYMOND:
Yeah, we like to even try to get that hard cost. Typically, we will try to bring in general contractors a little bit early, and we do have a pool that we use that will help us during preconstruction, even knowing that they're going to go out to bid to try to help us. We have an idea what costs to offer but also to get real hard numbers from GCs, even during the planning stage, which helps us to identify all those costs, and essentially, I agree, about 20 percent of the soft cost is typically where usually we see projects going.

FEMALE SPEAKER:
We also have questions coming in about converting space or renovating space versus building brand new schools. Can you talk a little bit about some experiences you might have converting space or renovating buildings and any warnings or important questions that people should keep in mind?

LENNY DYMOND:
Yeah. Well, first, I'm not going to try to scare anybody away from that because it can be—I mean, just looking at—typically you run into a good amount. You need to hold a large contingency when you are going and converting a space because as much as you can try and plan, there are too many hidden conditions.

For example, right now I'm dealing with a project where we're converting an old Catholic school, and we're throwing a ton of money at trying to just keep water out of the basement that we really didn't see until we basically [demolished] some of the walls to rebuild them, and we're going to the contingency on that. Not saying this happens on every project, and typically, obviously, the new construction cost will still outweigh a lot of these costs, but you just really—you need to make sure you're prepared. There's a lot of issues that no matter how much design planning goes into it, they're just simply unknown until you start really digging into a new space. It can be a lot; it can be very beneficial, but, again, got to keep in mind that there's going to be issues that you're going to run into.

PATRICK COOPER:
Absolutely. And I would just add that you know, certainly pay attention to the foundation, have someone come in and assess just the condition of your foundation. Certainly if you plan on installing an elevator, you'll want to do some test pits to determine the geotechnical capacity of the soil, the floor rafters, the roof rafters, [and] the roof condition. There's companies that can give you a property assessment report.

We talked about environmental reports. Poke a hole in the wall; [this will] help determine if you have water infiltration issues or mold, perhaps, and certainly you want to know this going into it, and if you can evaluate, get the right due diligence conducted, and assess your risk, you'll just be better off. You'll feel more confident when you have to allocate a contingency for the project.

FEMALE SPEAKER:
Great. You mentioned the punch list and limiting the number of questions or the number of people that come on the punch walk or being strategic in that. One question came in that many projects get bogged down in the punch list, and did you have any ideas or pieces of advice?

LENNY DYMOND:
Yeah, well, what we usually do when we get the punches, we'll start going through them. When it gets to a point where you'll negotiating—obviously, you're holding retainers from all your subs and your GC, so there is a financial weapon to use, I'll call it. But what happens at the end is we will—if it gets to a point where it's usually bogging down a job—is we'll go through the punch list, and we'll assign a dollar value. And usually we have this written into the GC contract that we are allowed to do this. We assign a dollar value for what is standard for each of these items and double that, and that is usually the amount of money that we will try and hold back until they completed to try—there's really no other way to force the GC to complete something than holding a financial carrot in front of it.

PATRICK COOPER:
Yeah, that's an excellent point. I might add that if you have the opportunity, if you have a lot of repetition in your spaces, a lot of classrooms that are somewhat identical in program and scope, if you can have the GC complete one classroom early, and punch that classroom so that it's understood just what level of quality, what level of finish, what level of final construction is expected, and then to repeat that, no less than that, throughout the entire school, it kind of sets the bar for excellence if you can do it.

LENNY DYMOND:
Yeah, that's the mockup stage, that you also should add to their contract also, because you want to know also, because you can look at…You can see your school, you can see the way it looks on paper, but until you've actually gone to the classroom and see where the marker board is and where everything else is and if there's a smartboard in there, there's really no way of actually seeing it. So doing a mockup—and we usually try to do that earlier in the process, to have them actually get all the materials and everything and do it right away, as soon as you possibly can, if it's a new building, when it's ready, helps you quite a bit and could eliminate a punch list down at the end.

JOSH KERN:
And just one more on this issue of punch list is this is an area where I think a really strong owner's rep can be very helpful. So, you know, while the GC is responsible for doing the punch list, having the right owner's rep oftentimes can really help—or probably not get bogged down in the punch list phase.

PATRICK COOPER:
Yes.

FEMALE SPEAKER:
Great. We have a couple of questions that have come in on financing and elements related to paying for all of this, which I know we had a webinar devoted exclusively to financing. But I'm wondering, Josh, if you might be able to answer a question a new school has. They're seeking new construction, and have any of you heard of examples where the new school—a new charter school—works with the district to finance new construction?

JOSH KERN:
It's not typically the way it's done for the schools that we work with. As a general rule, they—schools need to…their pro forma needs to be such that the school can kind of self-finance the project, whether it be new construction or renovation of an existing site.

There are certainly benefits of doing new construction. I think being able to express what those benefits are to funders may help you raise additional dollars to pay for those costs, but I don't know really of any examples where kind of your district or your authorizer would be able to find additional monies for a charter school because you're doing new construction versus renovation—but maybe you guys know something different.

PATRICK COOPER:
Grants.

JOSH KERN:
On the fundraising side, yeah, we see that a lot, actually—

LENNY DYMOND:
In New York, the School Construction Authority does end up having some deals with the schools. I don't get involved with that aspect of the financing of it, but I know a bunch of the schools we built have had funding from the School Construction Authority. But I'm not sure how that—the financing of that—went about. I mean, that's been a process that was—they were working on it earlier on their charter. I'm sure it's how that's been established.

FEMALE SPEAKER:
Okay, great. So we're moving into some slightly more school-specific questions that I think can be universal or more specific questions about the presentation. But one question is, generally, is it your expectation that a project manager should be on-site every day?

LENNY DYMOND:
Great question.

PTRICK COOPER:
Yeah, it is a great question.

LENNY DYMOND:
Typically, I find that no, the project manager is not; it depends on the size of the project. I just did a 120,000-square-foot school, and yes, we had a complete field office set up by the general contractor. So I kind of think it depends on the size of the project, to be honest. We would recommend that there's at least a superintendent, someone that—they need to be on-site every day, 24/7—well, not 24/7—but whenever work is going on. It really depends on the size of the project of whether or not you need to have a project manager because to that extent, you would also have a field staff, you would have a—you know, there would be a secretary who's doing the change orders and everything and other paperwork from the actual field office.

So I think it really depends on the size of the building warrants having somebody and in what capacity of people you have on the project.

PATRICK COOPER:
I would agree.

JOSH KERN:
Yeah. And just to reinforce what Lenny said, the GC should have a site superintendent on the project anytime that work is happening by any sub. The site superintendent that's employed by the general contractor should be on-site. And [inaudible] everybody's in agreement with that, and the quality of the site superintendent is a major factor in determining the quality of your projects, and knowing who your site superintendent's going to be upfront is…

LENNY DYMOND:
This goes back to the interviewing process why you want to do that, and you want to know what jobs that superintendent was on because you really want that superintendent who's been on school projects. And there you want to check references because the guy might be the nicest guy in the world when you see him, then you talk to some of the subs or somebody else that deals with him. It's like the guy says he's mean, he doesn't know what he's doing, he's not there, he's sleeping in his trailer; that's not the kind of guy you want on-site, and that's the interview process of why I recommend meeting the superintendent also is one of the project team members that you interview early on.

PATRICK COOPER:
I do agree with Lenny; it depends on the size of the project. But it also depends, to me, on the timing or the phase of the project. If you're going through a pretty extensive geotechnical exercise, and it's pretty tenuous and there's a lot of field conditions, then certainly you may require…there may be times during the process that a daily presence might be required, but typically that's not the norm for a

project manager [PM]. But again, it's as needed. A good PM will be there when he's needed.

LENNY DYMOND:
That's right. I agree.

FEMALE SPEAKER:
And in terms of the contractors, do they need to provide performance bonds and grading bonds or…other kinds of materials?

JOSH KERN:
Good question.

LENNY DYMOND:
I think that typically depends on the financing; that depends on your lender what they require. Bonding is always good to have; it's sometimes, though, if it's a cost that you may want to be something that you want to evaluate [inaudible]. But I think personally, it's essentially up to the lender that is going to drive that decision.

PATRICK COOPER:
That's right. And it is an additional cost, but also if you can't afford the payment and performance bond, there may be some other options, like having some of your major subs be bonded—concrete, mechanical, electrical, plumbing, elevator—whatever major subs that you might have on the project just to protect your interests.

FEMALE SPEAKER:
Great. Someone had a question about the lawyer. What kind of lawyer is ideal to have on the team; is it a land-use lawyer, a real-estate attorney?

PATRICK COOPER:
That's a good question.

JOSH KERN:
That's a great question.

PATRICK COOPER:
Yeah, to me, it depends on the type of project. If it's a ground-up project and you are pushing the envelope for the zoning proposed for your area, then you'll need a land-use lawyer; you may need one any way. There could be a historic element. If it's an existing building, it may have a historic element, you may need a land-use lawyer to help you navigate those.

JOSH KERN:
Yeah, I mean, for a lot of projects that we do, we typically have more than one lawyer.

LENNY DYMOND:
Yeah.

PATRICK COOPER:
That's right.

JOSH KERN:
And if you're working for a larger firm, then the firm will have other attorneys in-house there to help.

LENNY DYMOND:
Very true.

FEMALE SPEAKER:
A question came in: Do you need to hire a clerk of the work or is the clerk of the work necessary if the owner has hired a project manager? I'm not sure if that's a common term.

PATRICK COOPER:
I'm not familiar with that. I've heard the term but not familiar where—with that term as it relates to project management or construction personnel, but…
LENNY DYMOND:
Yeah. I'm not familiar but…

PATRICK COOPER:
You know, they could be speaking about an expeditor, someone to expedite your permits or someone to expedite your utilities, and if that's the case, then yes, you would want that person on your team. Some owners see that as a luxury, and if that's the case, that's unfortunate because these municipalities have people that are layers and layers and layers inside the institution, and sometimes it's hard to get your project the attention that it needs.

LENNY DYMOND:
And, yeah, like I said, I'm out of New York City, and we have a pretty extensive—when you need an expeditor to get through—just to say I've dealt on small municipalities and sometimes they can be even worse in dealing [everyone laughs]—something like New York City, so.

JOSH KERN:
Yeah.

LENNY DYMOND:
Yeah, I would recommend it; that's the expeditor we're talking about; yeah, you need somebody onboard to help navigate that process.

FEMALE SPEAKER:
This might fall again into the finance category, but [I am] wondering if you have experience with a sale leaseback transition, and any hits on the logistics?

JOSH KERN:
Where instead of the school having the—being the owner of the building, you have a third party buy the building—the third party finances it, and then leases the building.

LENNY DYMOND:
That's one of the models that we do actually go through at Civic Builders. We have purchased land, and we've developed it, and we developed it knowing what school—I mean, the difference being is what we know—we've already

engaged a school, and we probably already have a some sort of agreement with the school. So we do own the building and we built the building, we funded the project, and essentially leased it out to a school. So it's a great model actually, and we're always looking for people to come into that because it's being a not for profit, it gives us a way and we actually do fund the majority of the project. We do the financing, and the school just basically signs the lease and it's our financial division takes care of all that kind of stuff.

JOSH KERN:
Yeah. I would encourage the schools to kind of model both. If they are creditworthy and they can self-finance, they should look at like a pro forma that has themselves financing the property and the project and a model that has them doing a sale leaseback where they have a third party develop it. There's certainly advantages, as Lenny mentioned, to kind of having a third party do it, but I would say for, you know, my recommendation is to schools is to kind of go through the process of really understanding what both look like, the cost and benefits of both and make a decision.

LENNY DYMOND:
Absolutely.

FEMALE SPEAKER:
And one of our last questions—if you have any additional thoughts or tips on the submittal process and all of the final permits and things that are required.

LENNY DYMOND:
Just keeping on top of it. I mean—I can't emphasize enough—and the architect will help, and they'll go through the process with you, and you ask the right questions. It's just basically knowledge is power. The more you know about it, you can just gauge. And like I said, the owner's rep [and] the GC will stay on top of this because it's something that will dog the project.

From the submittal process, just making sure you know exactly and asking three, four—there's never enough time to ask when something's going to be delivered to the point of with the closeout documents and trying to get a TCO. It's just, again, because it's going to fall through the cracks; paperwork goes in wrong—it gets lost. And it's just a matter of continually having a list and keep on asking the same questions over and over—it's that simple.

JOSH KERN:
Absolutely.

LENNY DYMOND:
It's got to be done.

PATRICK COOPER:
And, Lenny, you may have mentioned this before, but, you know, I would make that a project deliverable from the architect…

LENNY DYMOND:
Absolutely.

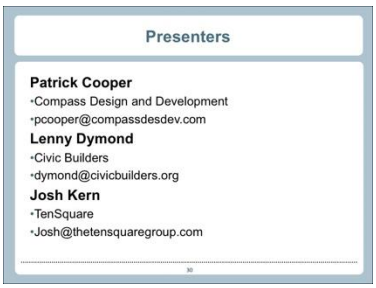
PATRICK COOPER:
…excuse me, from the contractor.

LENNY DYMOND:
Both.

PATRICK COOPER:
Right after you issue that notice to proceed, give me a time frame where I can have a submittal log—a submittal schedule. And if you can get that document from your contractor, you have to demand it. Basically, that submittal schedule basically tells the architect when they can anticipate receiving submittals for the individual components or assemblies specified on the project, and they can manage their manpower accordingly.

They can expect it. There's going to be surprises; there's going to be that mechanical submittal that needs to come to approval on two days. The submittal schedule will help to manage that process, and you can review it and administer it as well.

JOSH KERN:
That's great. Unfortunately, we're basically out of time here, so I want to thank you both, Lenny and Patrick, for taking the time to talk to the participants on our webinar. I also want to take this opportunity, as it's our last webinar of this four-part webinar series, to give a special thanks to the National Charter School Resource Center, here housed at the American Institutes [for] Research, and also, of course, the Power of Education for funding this series.



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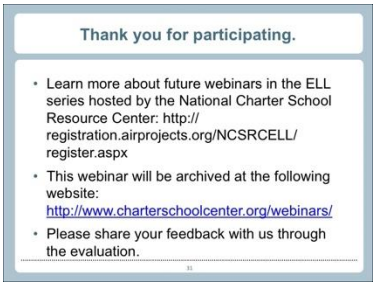
All of the webinars are on the National Charter School Resource Center website, where you can just see the presentations but also the toolkits are there for you to view and download; there's still opportunities for you to ask…

[TAMMIE KNIGHTS:]
[We have a survey that will pop up on your screen, so if you could take just a minute more to complete that survey. Thank you again everyone for joining us, and we hope that you'll be joining us again soon.]



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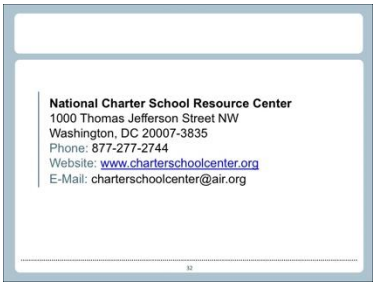

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