

# CoLABorative Project Delivery

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# Main Ingredient

- What is the most important ingredient needed for a successful project...?





# Know your people

- Commander Hadfeild recognized the need to understand the abilities of his people so he spent 5 years with them.



# Collaboration

- Collaboration is that hard to define, intangible ingredient that should be added to the project batter to ensure a delicious dessert is served at the end.





# Identify

- The challenge is identifying that ingredient and determine how it will enhance the taste of the other ingredients.



# Quality of the ingredients

- Investigating the origin of the ingredients is relatively straight forward, in this case check the recipe or credentials and experience of the team.



# Listening

- During an interview, listening to the natter of the team making a presentation does not a good cake make.
- Change the game and make the interview a problem solving session.





# Team Dynamics

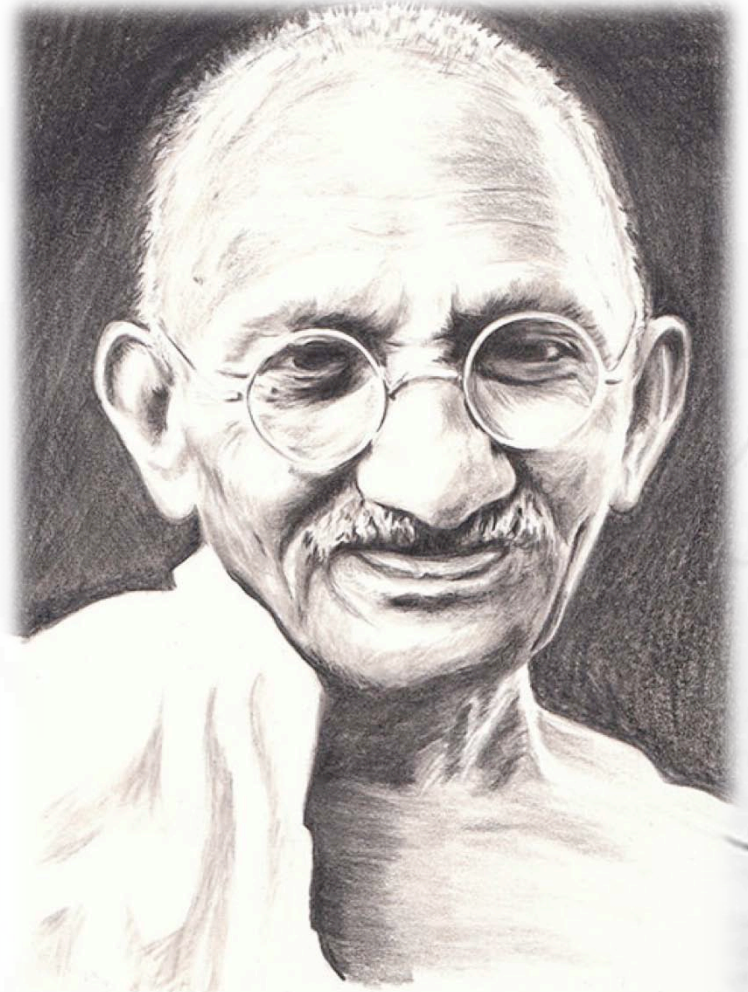
Investigate the possibility that the Team Dynamics you seek are achievable

- Owner, Consultants, Contractors – work through a 4 hour problem solving session that deal with project challenges.
- This will provide your best indicator on how the Team will work together on the project.



# Core team attributes

- Trust
- Collaborator
- Solution provider
- Listener and communicator
- Knowledgeable persuader
- Strategic planner



"YOU MUST BE THE CHANGE YOU WANT TO SEE IN THE WORLD"  
MAHATMA GANDHI  
(1869-1948)

# Search for Collaborative Behavior

- Innovative
- Creative
- Supportive
- Provide strong leadership
- Develop strategic partnerships
- And recognize successes





# Collaborative Culture Proofs

- A problem solving session during procurement of the best of ingredients will reveal how the team will deliver the work.
- Include key team members = Client Project Representative – Consultants – and CM/PM/ Super



# Non-collaborative results

- Lack of trust
- Wrong perceptions
- No continuity
- No leadership
- Uncertainty



# Trust

A trusting relationship should foster a no-blame culture that encourages innovation & collaboration





# Time will tell...



- Like Commander Hadfeild, he did not spend 5 years with the executives at NASA, he spent it with his **TEAM**.
- You are hiring a project delivery team, you know the executives are in the office supporting them, but they are not making the day to day decisions.

# What can spoil the broth?

- Project Management firms that manage using a heavy hand and impede the collaborative process creating an environment/culture of FEAR.
- Do you want the situation where your PMO acts as the Dictator representing your interest?



# The Value of a PM or PMO



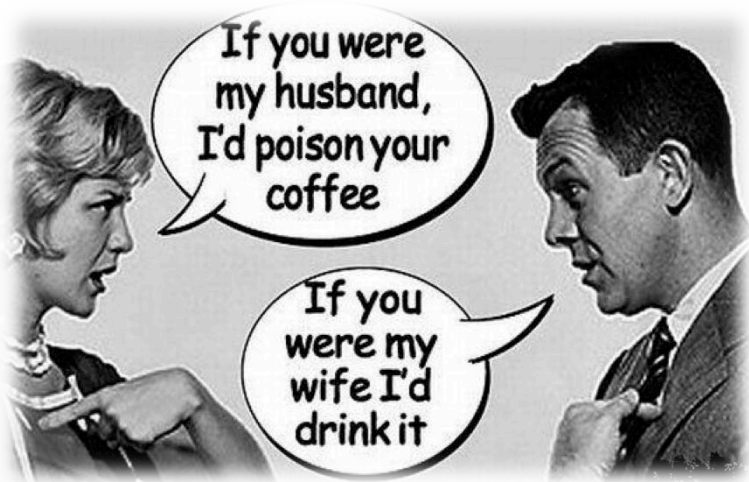


# Advantages vs. Disadvantages

- Provide expertise the Client does not have
- Clients do not have to build a project specific team then let them go
- Client continues to deal with their own business operations – BMO
- Accountable for performance
- Design and regulatory manager



# Advantages vs. Disadvantages



- A redundant layer of cost and fees
- Decisions made the Client does not agree with
- Can impede the transfer of critical information to the Client
- PMO becomes a pass through adding little value

# Effective use of a PMO

Give the PMO the authority to:

- ❖ Decide
- ❖ Drive design to meet the budget
- ❖ Manage the performance of the design and construction team
- ❖ Show leadership not dictatorship
- ❖ Deliver results
- ❖ Provide meaningful reporting for Clients to make informed business decisions





# An Institutional Owner's View of a PMO

- Understand the Clients culture
- PMO should not be the aggressor to be seen as saving money
- Clear decision structure with no roadblock or secondary approval requirements
- Focus on complex projects only
- Proper integration between Client staff and PMO

# An Institutional Owner's View of a PMO

- Facilitate a trusting team environment
- Effective reporting and commissioning structure
- Eliminate potential conflict of interests
- Acknowledge staff turn-over will occur and plan for the transition
- PMO should not impede/down-play/change important information from design/construction team
- Allow for regularly scheduled reviews with **senior** Client, PMO, Design and Construction team

## Client

- A client's inability to translate their business plan into the required scope of work for the project.
- Hidden agendas and a lack of openness regarding the driver behind the project.
- Simple procrastination and an inability to acknowledge problems.
- Lack of trust that their project team have their best interest at heart.



## Consultant

- A poor working relationship with the contractor.
- An unwillingness to consider new ideas or an alternative way to build the project.
- Less than adequate fees necessary to develop a decent level of design information.
- A consultant's contractual arrangement that fails to get answers from the Client.
- Time allowed to fully develop a coordinated set of drawings.



## PMO

- No authority to make decisions.
- Feels they add value through management by dictatorship rather than collaboration.
- Desire to use systems and process they are familiar with rather than choose the system that works best for the entire team.
- Inexperience with the chosen project delivery model or type of project.
- Conflict of interests.



## Contractor

- Lack of understanding of the project deliverables.
- Inability to accurately plan, cost and schedule the work.
- The late realization of project challenges.
- Re-deployment of field staff.
- Inexperienced work force.





# Desired Results

**Develop a client focused relationship through positive behavior**

**Build trust through exceptional service delivering creative solutions**



## Happy Client

Creative Solution

+ High quality service

+ Value for money

= Happy Client

# Results

- The 90's resurrect collaboration
- Core objectives
- Preaching collaboration



# And now, a word from the Clients

*“... understands the importance of **partnership.**”*

*“The team was able to add value during the early stages of the project through **innovative** strategies which has proven to benefit the client immensely **beyond initial expectations.**”*

*“The team worked tirelessly to develop solutions that would allow the Client to maintain the design intent while driving toward a date certain and cost certain delivery... their **collaborative approach** with the Design Team contributed to the success of this project. The relationship was one where the team partnered to reach project.”*



*“Our relationship has been, and continues to be, based on the concepts of **collaboration**, professionalism, and trust.”*



Value is added  
through our  
behavior





# Choose the Right Project Delivery Method



Pause to choose the method ...





# Traditional Project Delivery Methods

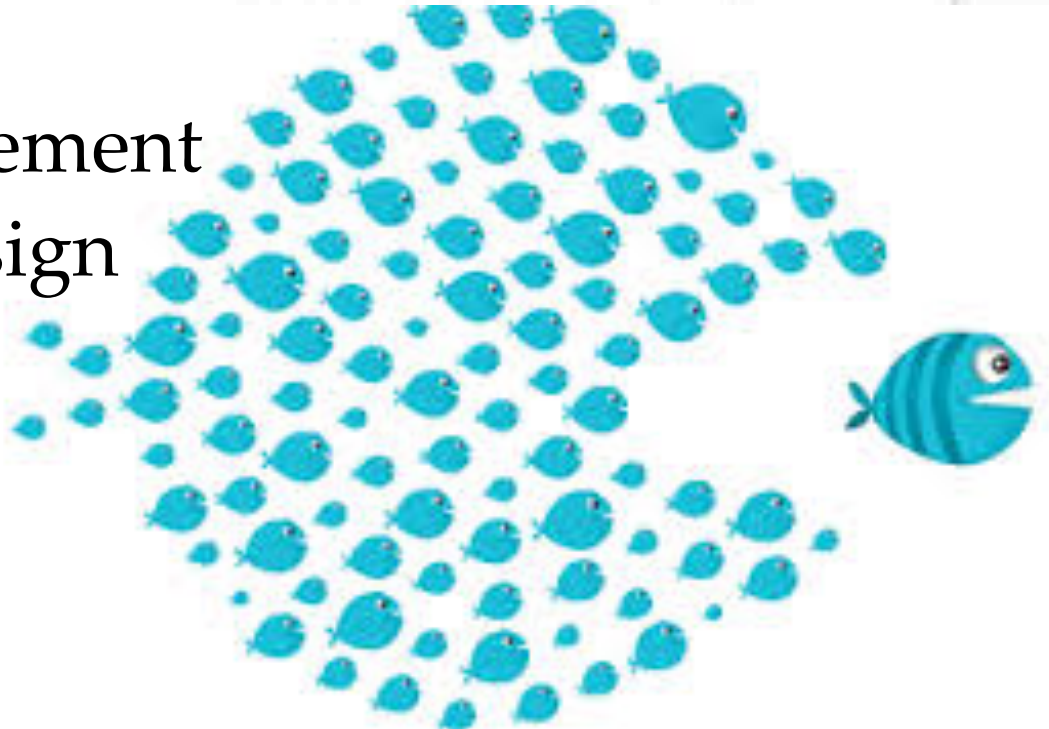
*Master Builder ?*

- Lump Sum or Stipulated Price
- Construction Management
- Design Build
- Cost Plus
- EPCM



# Alternative Delivery Models

- P3
- Strategic Alliance
- Integrated Project Delivery
- Design Build
- Interface Management
- Target Value Design
- Best Value



# Which delivery method to choose?

- Consider the project goals and objectives
- How can you determining value?
- Who is best suited to assume the various project risks?
- Cost restraints
- Time to market
- Political/economic influences
- Quality requirements
- Operational demands

# Why a fee based choice?

- Qualification based selection
- Low fee does not reflect good value





# Assigning Risk

- Who is accountable / responsible?
- At what cost?
- Risk is assigned by contracts
- Risk varies depending on delivery
- Risk Tolerance = \$\$\$



▼ LOW

HIGH ▲

P3

EPC

DESIGN-BUILD

TRADITIONAL

CM  
NON-AGENCY

CM  
AGENCY

## Client Risk Spectrum

This spectrum illustrates the level of client risk associated with each project delivery method. Contract terms and conditions may alter the level of risk.

# Choose CM or DB

- Again it comes down to people. So logic dictates that there is value in choosing the right team of people based on qualifications.
- Try it... its NWPTA compliant



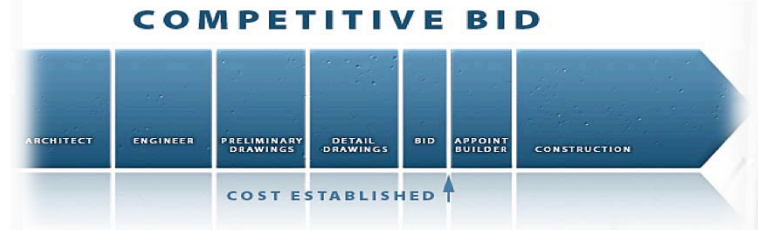
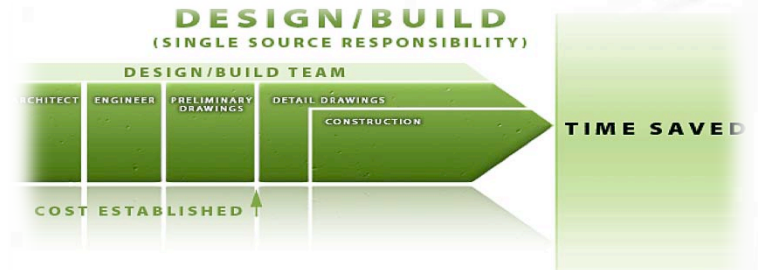
# Construction Management



- If Construction Management is your choice
- Ensure your CM has the ability to provide:
  - ❖ Collaborative project delivery experience
  - ❖ Input at design development
  - ❖ More flexibility to process
  - ❖ Improved budget information (open book)
  - ❖ Design achieving the target price through consultation
  - ❖ Selection of key trade contractors
  - ❖ Fewer changes/extras
  - ❖ Team approach resolving project challenges

# Design Build

- If Design Build is your choice
  - ❖ Designers & contractor form a team
  - ❖ Contractor typically leads
  - ❖ Different risk profile for designers & contractors
  - ❖ Increased risk transferred to proponent
  - ❖ Can be more cost effective
  - ❖ Project delivery more efficient
  - ❖ More room for innovation
- And Faster Delivery which is very important in an escalating market.







# Are P3's confusing ?

# Public Private Partnership

Will a P3 best suit the goals and objectives of the project?

- Increase economic activity delivering projects that may otherwise have not been started
- Reduced administrative costs to incurred by public entities
- Delivers projects faster and more efficient than conventional process
- No deferred maintenance, asset is maintained



# Abbotsford Hospital... Proof?



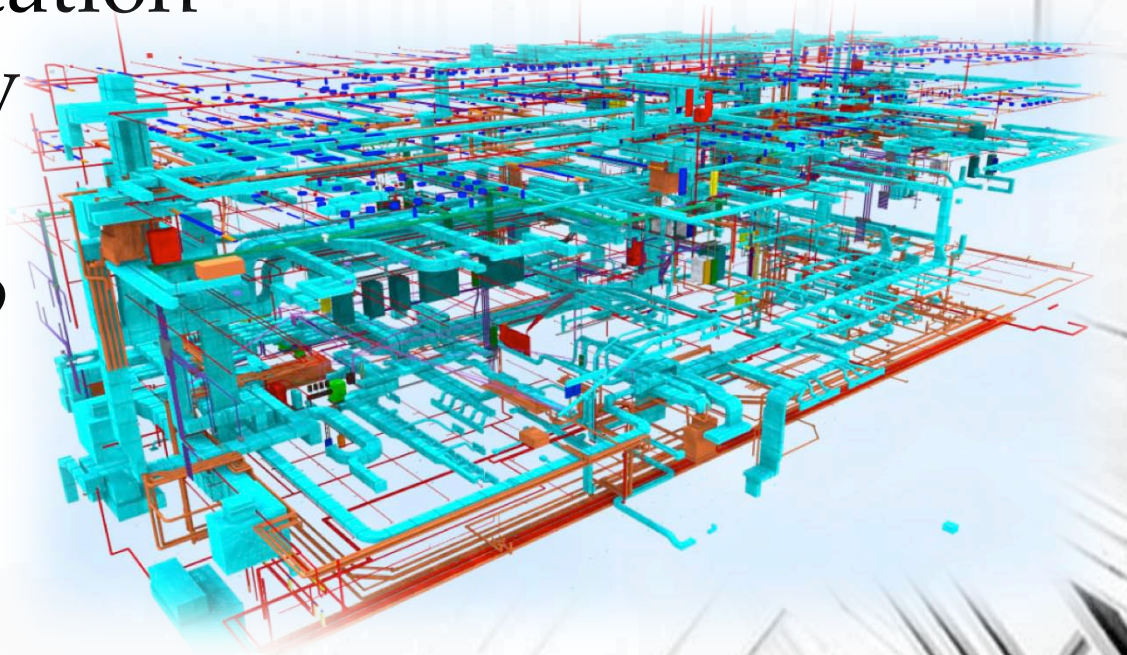
## Key project successes:

- **\$ 0 change orders – first for Canadian public healthcare capital projects**
- **On time – May 7, 2008**

- **No preconceived design**
- **Performance-based specifications**
- **Partnership attitude**
- **Strong political commitment**
- **Health Co P3 knowledge & strong project management**

# Integrated Project Delivery

- Collaboration and trust
- Best interest of the project
- Innovation
- Communication
- Technology
- Planning
- Leadership
- BIM





# “Best Value” Factors For Success

- Fair (state/follow rules)
- Open (no prequalification / open to all with experience)
- Impartial and Transparent (minimize evaluator bias / provide debriefing)
- Efficient (minimize efforts)



# Regardless of delivery model...

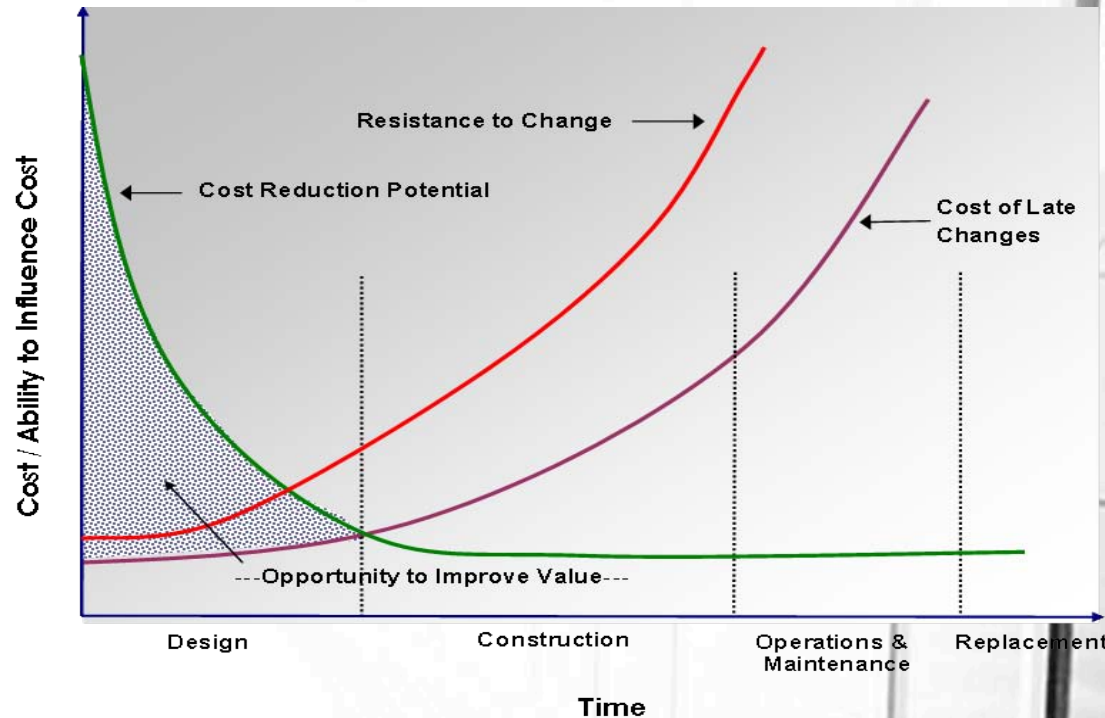
## Procure this:

- Problem solving ability
- Depth of resources
- Technical qualifications
- Fees
- Partnering
- Trade contractor relationships
- Ability to work as a team



# And buy some of this...

- Unique approach to project issues
- Flexible delivery
- Understanding of local market conditions
- Relationships with design consultants and trade contractors





# Lab Lessons Learned



# SYLTA



- WDA CM KA HCP and CL3?
- SA CM KT CFIA CP?
- DYUTI BIM HOT QA/QC results?
- Will your builder DWTSTWD?
- Is VIDO a new cell phone company?

# What should your CM know?

- Containment through air movement
- Physical air-tight barrier & pressure resistant doors
- Negative or low pressure air within the space
- Exhaust through HEPA filters
- Epoxy coatings to surfaces





# Cost Considerations

- Signing off on a final scope of work in order to establish a control budget.
- Effect the mechanical and electrical trades have on achieving the budget
- Lack of competitive pricing on highly specialized equipment





# Schedule Influences

- Time to establish a final control budget
- Mechanical trades impact on the schedule
- Schedule delays due to certification
- Appropriate time for commissioning



# Drive for Quality

- Coordination through BIM
- Value for full size mock-ups for wall sections
- Reducing concrete voids through pumping up from below forms and use of agilia
- Coordination of embeds
- Surface preparation efforts for specialty coatings
- Maintaining air temperature and air quality



# Commissioning Challenges

- Proper time allocation for commissioning
- Effect of late mechanical changes at project completion
- Late participation of Clients commissioning agent and containment consultants
- Mechanical trades understanding of the systems and how they interact with the rest of the building and equipment





# Procuring Through Problem Solving





# Have You Asked the Following Questions?

- Why am I building this project?
- What are the project goals and objectives?
- How do I procure the best team?



# Do You Want to Collaborate or Dictate?

- Do you want your team to be innovative and creative? Or do you want to control the process?
- Do you want to fight for your right to dictate how the project is delivered, or do you believe you can trust the team you select will deliver best value?



# Best Value – How to Get It

- Does a fee-based decision guarantee best value? If NO, do not make your choice based on fee.
- Does your desire for high quality influence your purchasing decision? If YES, award on capability.
- If you want high quality, should you dictate which trades the builder should use? If YES, then why?



☐ YES  
☐ NO  
☐ MAYBE

# Procure Collaboration

**You desire your project delivery process to deliver:**

- Earlier project completion,
- Reduced costs, less delays,
- Single point of responsibility,
- Converging interests,
- Quality project,
- Fewer claims and litigation,
- A collaborative team process that provides innovative solutions,
- A strong relationship ...





# Procure Collaboration

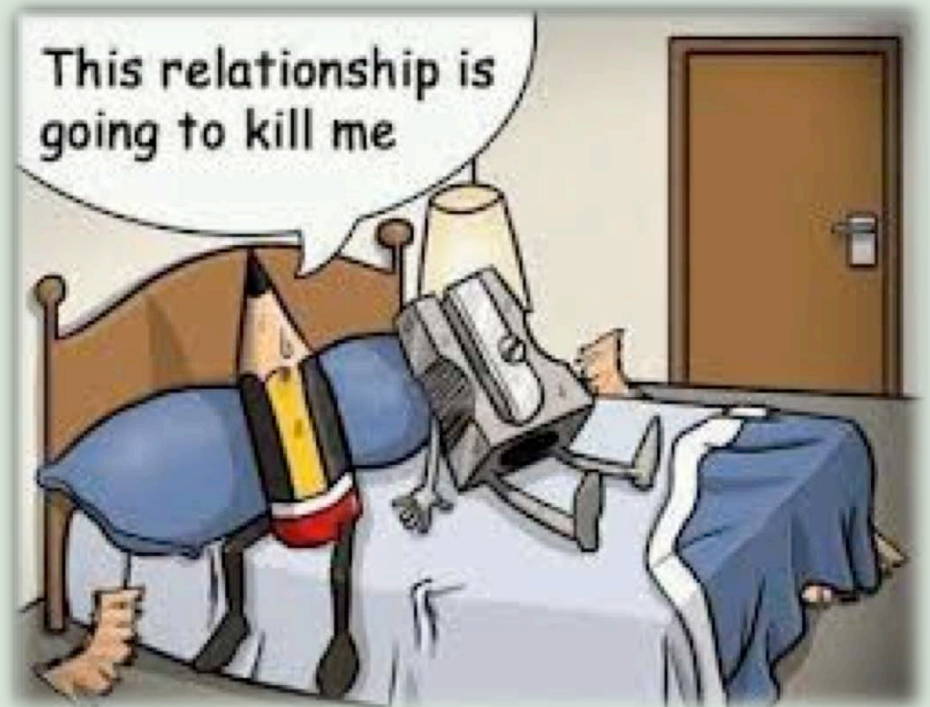
Then that requires you to determine a way to procure a strong collaborative TEAM, which is not always the lowest price.

**Your Relationship With Your TEAM is Key, so buy Relationships!**



# Determine if You Can Buy **RELATIONSHIP** Behaviors

**R**espect  
**E**xperience  
**L**egal  
**A**ttitude  
**T**rust  
**I**ssues  
**O**wnership  
**N**etwork  
**S**olutions provider  
**H**umble  
**I**nnovation  
**P**ersonal



# RELATIONSHIP

**R**espect... determine if:

- Will you respect the decisions made by the project team?



# RELATIONSHIP

**E**xperience... determine if:

- Your Team's experience will prove to be a valuable asset and supports this type of project?



**EXPERIENCE**

EXPERIENCE IS GAINED BY NOT DOING THE SAME THING TWICE!



# RELATIONSHIP

**L**egal... determine if:

- You have chosen a form of contract that restricts creativity and innovation because it has your builder by the ...?



# RELATIONSHIP

**A**ttitude... determine if:

- Your Team's attitude has been/will be collaborative?



# RELATIONSHIP

**T**rust... determine if:

- Your Team can prove it has earned the trust of previous clients and will do what they say they will do?



# RELATIONSHIP

**I**ssues... determine if:

- Your Team understands the cause and impact of the issues you are most concerned with?





# RELATIONSHIP

**O**wnership... determine if:

- Your Team will take ownership of project challenges, bring responsibility and accountability to your projects to protect your interests?



# RELATIONSHIP

**N**etwork... determine if:

- The builder's network of trade contacts enhances the value of your project?



# RELATIONSHIP

**S**olution provider... determine if:

- Your Team will offer solutions that solve challenging project issues?



# RELATIONSHIP

**H**umble... determine if:

- Your Team's reputation and behavior will deliver construction services through a fair, conciliatory approach, rather than a combative approach?





# RELATIONSHIP

**I**nnovation... determine if:

- Your Team will offer innovative solutions to solve complex challenges?



# RELATIONSHIP

**P**ersonal... determine if:

- You want your team to commit personally to the success of the project?



# Client Thoughts Regarding Team Choice

- Will this builder listen to my needs?
- Is this builder responsive?
- Do I feel excited?
- Does the builder understand how I do business?
- Why do I want a relationship with this builder?
- Can we communicate well?
- What does this builder fear?
- **Would I like to work with this builder?**



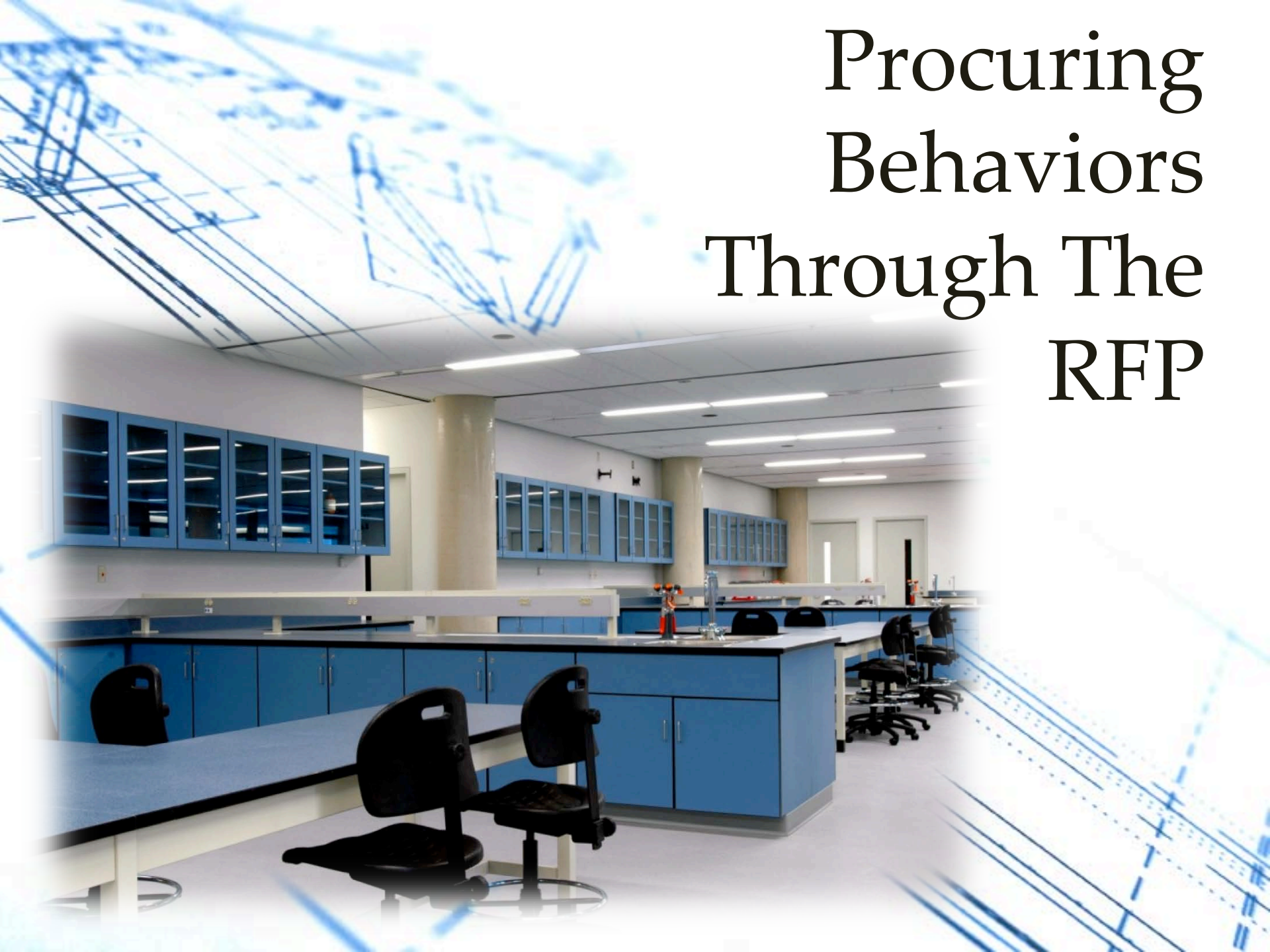
# Typical Client Choice Motivators

- Cost (capital & life cycle)
- Schedule
- Quality
- **Experience**
- Qualifications
- Financial strength
- Risk
- Value for service
- Competitive advantage
- **Reliability**
- Available resources
- Productivity
- Safety
- Control of market
- **Compatibility**
- **Flexibility**
- **Creativity/ innovation**
- Compliance





# Procuring Behaviors Through The RFP



# Write the RFP's to Reveal...

- Who is accountable / responsible?
- Performance criteria in lieu of prescribed specifications
- If the builder offer strong relationships with knowledgeable trade contractors?
- if the trades can be brought onboard early to resolve project challenges?
- The Builders understanding of local market conditions?



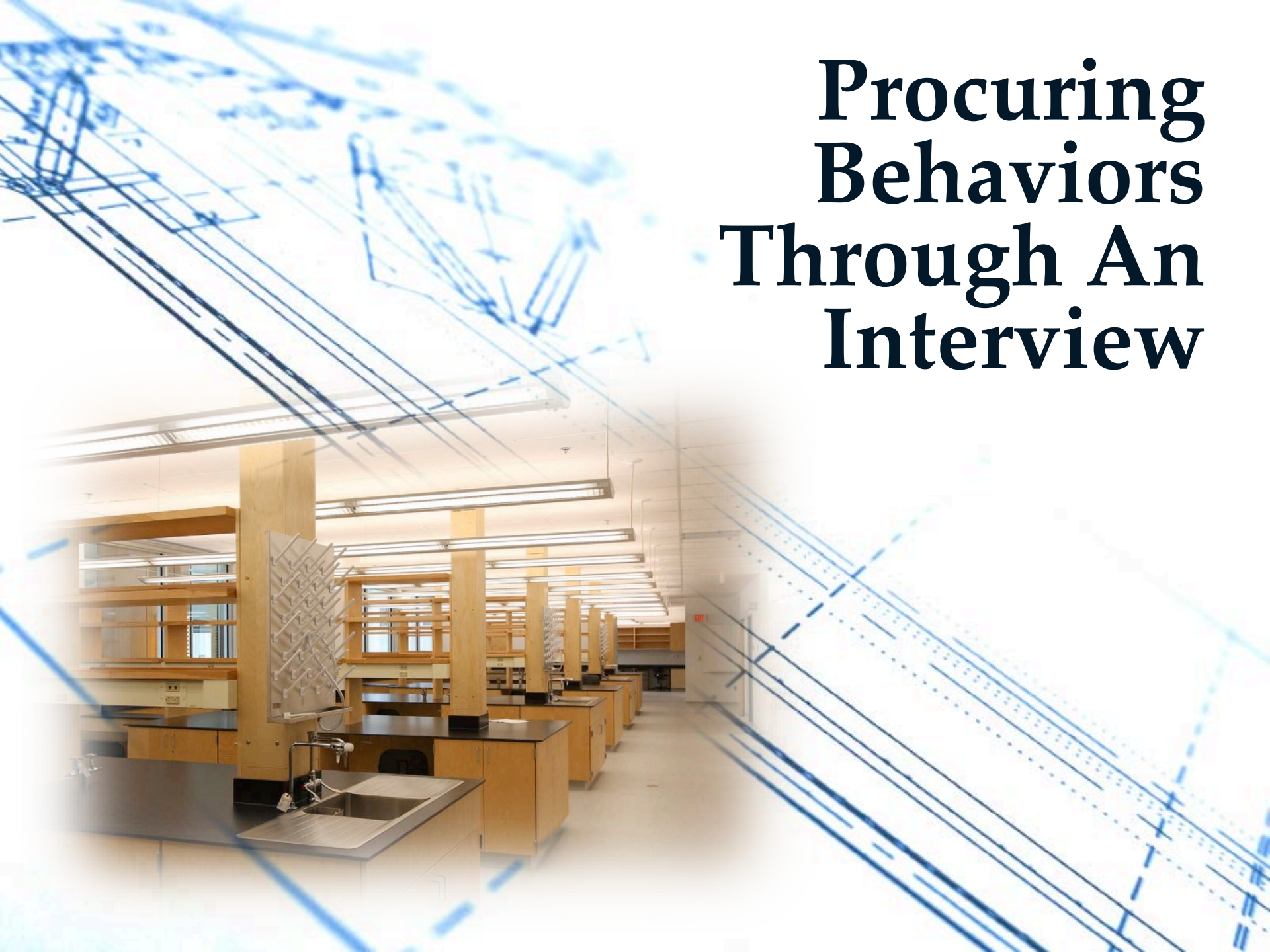
# Write the RFP to Reveal...

- If there can be a converging of interests for all parties (i.e., contractor, owner, architect)?
- If the design and construction firms have worked together successfully?
- If their response provides solutions to anticipated project challenges?
- Can the builder show innovation and present a creative and effective analysis of owner needs?





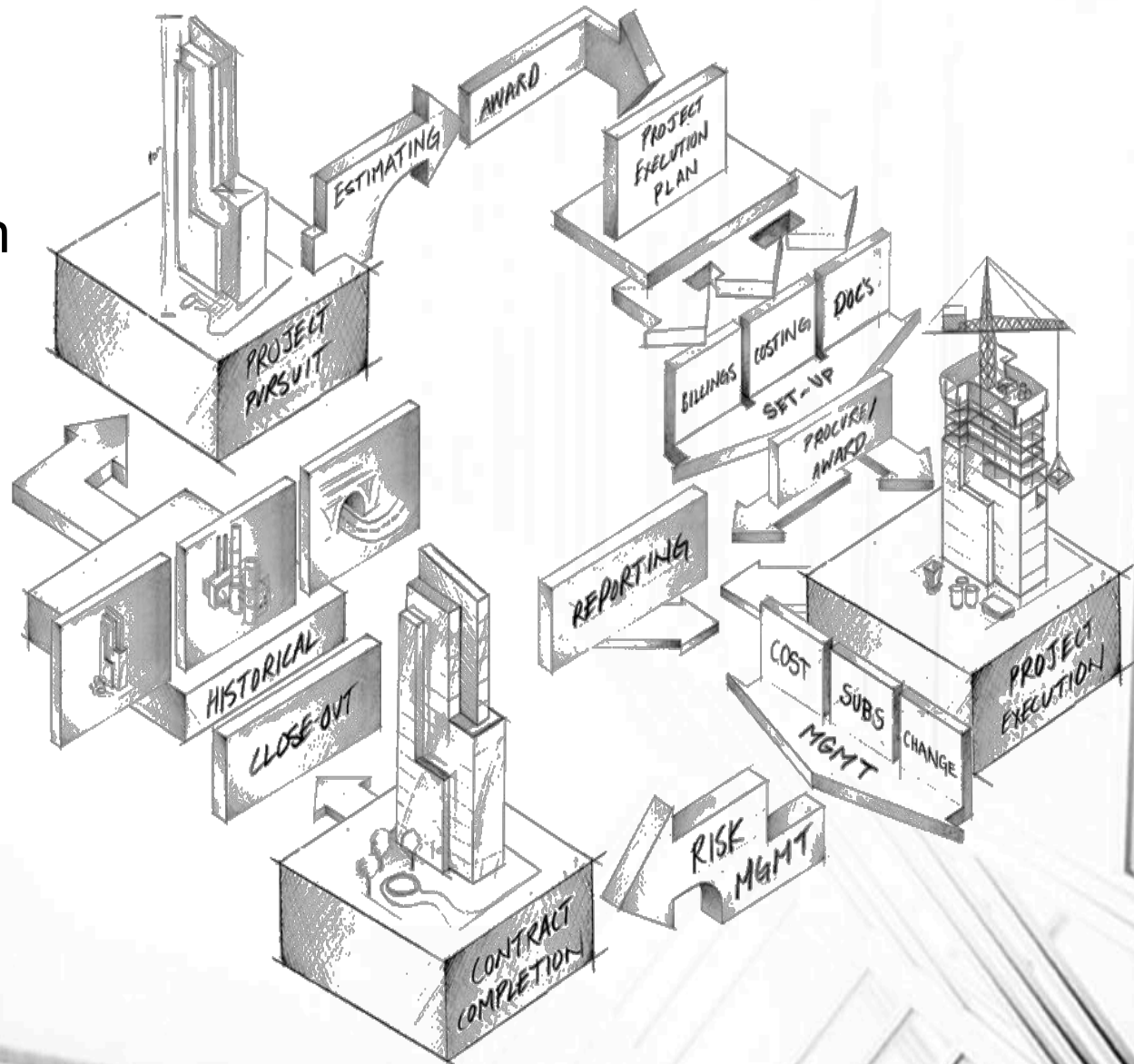
# Procuring Behaviors Through An Interview





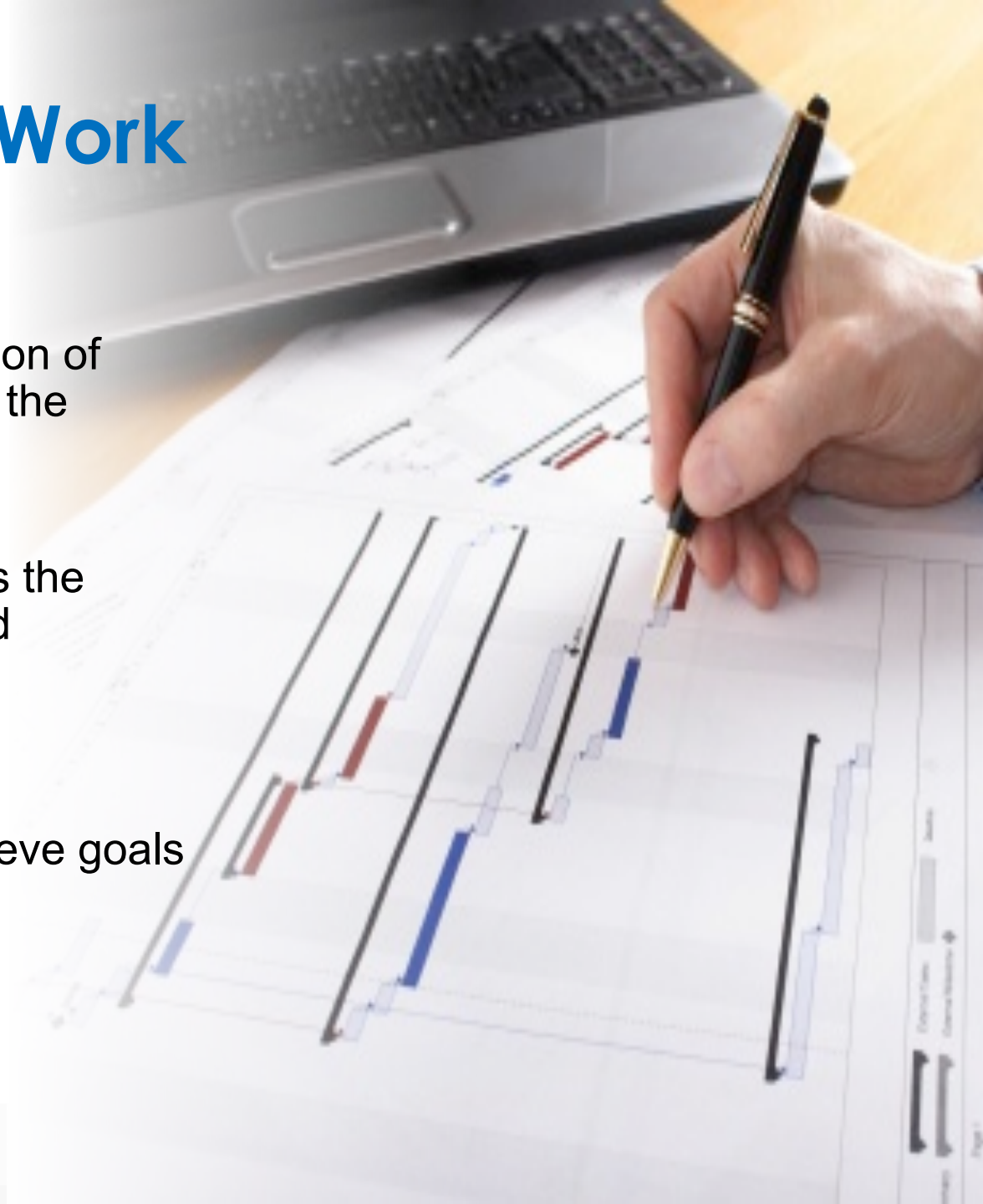
# Interview Project Discussion

- Where does collaboration reside in the life of a project?

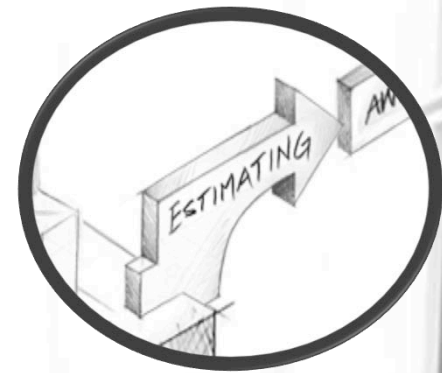


# Planning the Work

- ❖ Forces consideration of **ALL ASPECTS** of the project
- ❖ Written plan allows the vision to be shared (communicated) consistently.
- ❖ More likely to achieve goals
- ❖ Identify Risks



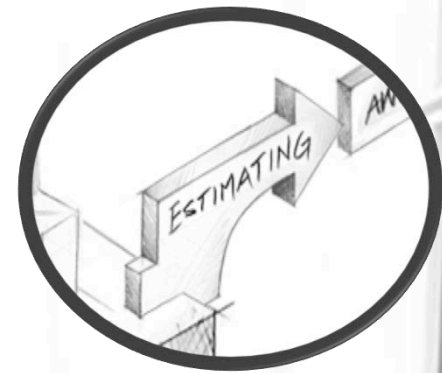
# Planning should include



## ➤ Project Execution Plan

- ❖ Project Overview
- ❖ Project Team Organization
- ❖ Site Logistics
- ❖ Safety & Environment
- ❖ Major Construction Work Plans
- ❖ Material Handling Systems
- ❖ Schedule
- ❖ Quality Plan
- ❖ Contract Closeout Plan
- ❖ Project Procedures
- ❖ Communications
- ❖ Risk Assessment

# Question the tender plan

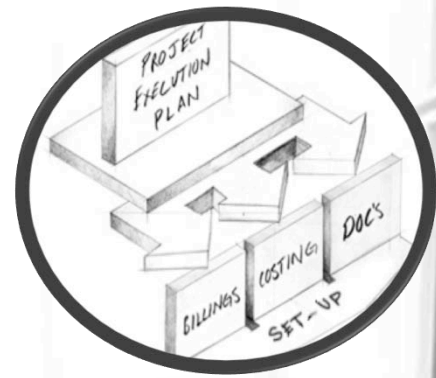


## ➤ Tender closing

- ❖ Do they call subtrades days in advance – know who's bidding
  - Eliminate scope gaps
  - Ask for Lead Letters
  
- ❖ Prepare Bid Recap Sheets in advance
  - Separate sheets by scope of work
  - List all the work on left side
  - List expected subtrades along the top



# What is their Start-up plan



## ➤ Award Subcontracts

- ❖ Pre-Award meetings with Low-Bid Subcontractors
  - Include the Superintendent
  - Make sure they include all required scope
  - Review their scope – get them to show you everything!
  - Set aside one full set of drawings
    - Markup subcontractor work, who does what.
    - Great reference for the Superintendent on Site
  - Include the minutes as an appendix to their subcontract.

# Understand key roles of Team

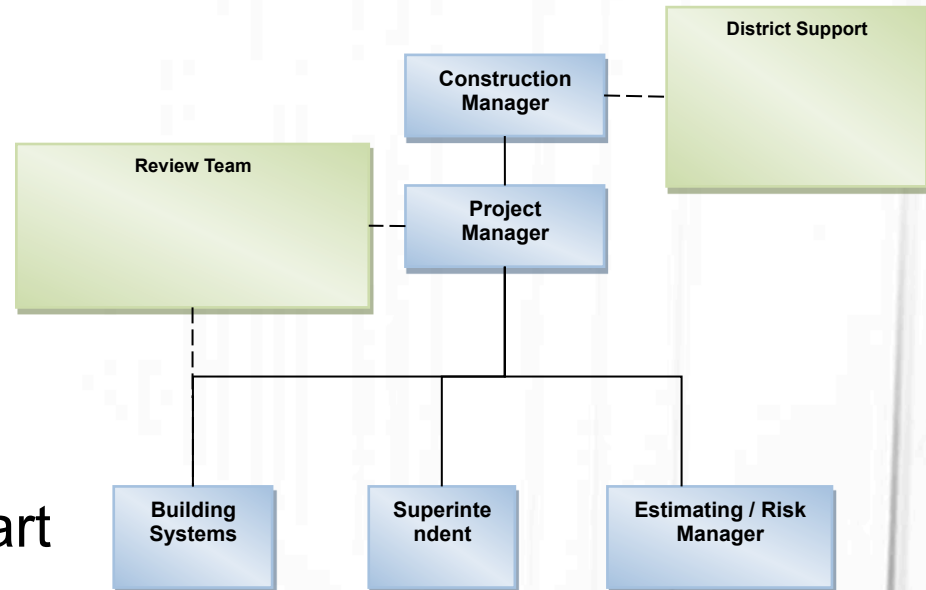
## Project Team Organization

### Value:

- Describes roles and responsibilities

### Includes:

- Project team contact directory
- Team organization chart
- Narrative of job duties
- Affirmative action/ minority requirement plan



# Know they have an environmental & safety plan

## Safety & Environment

### Value:

- Addresses safety & environment plans from a project specific perspective

### Includes:

- Project Specific Safety & Environment Plan
- Sustainability – Green Building, LEED™
- Environmental Management System



# Is their schedule realistic?

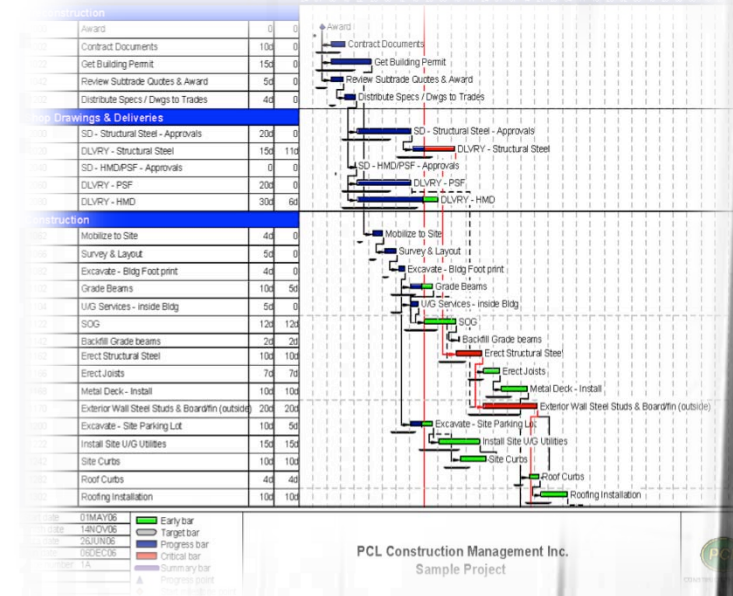
## Schedule

## Value:

- Provides concise, high-level communication of major project milestones

## Includes:

- Milestone schedule
- Cycle/responsibilities for progress updates
- Baseline / Target bars / Activity Notes





# Prove their quality plan works

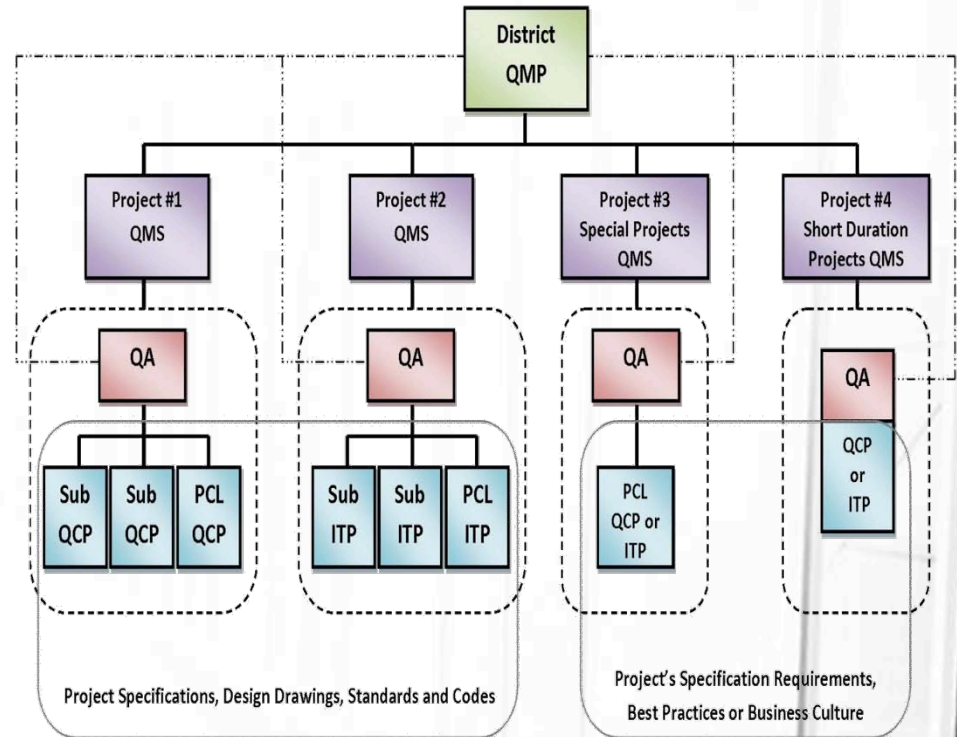
## Quality Plan

### Value:

- Planning for quality... is planning to build it right the first time

### Includes:

- Project specific quality plan



# Do they use effective procedures?

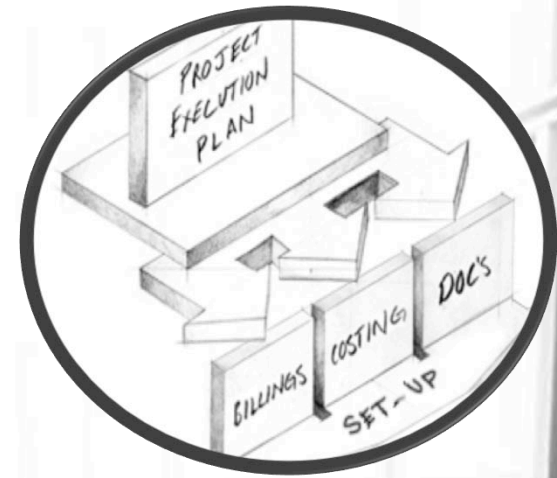
## Project Procedures

### Value:

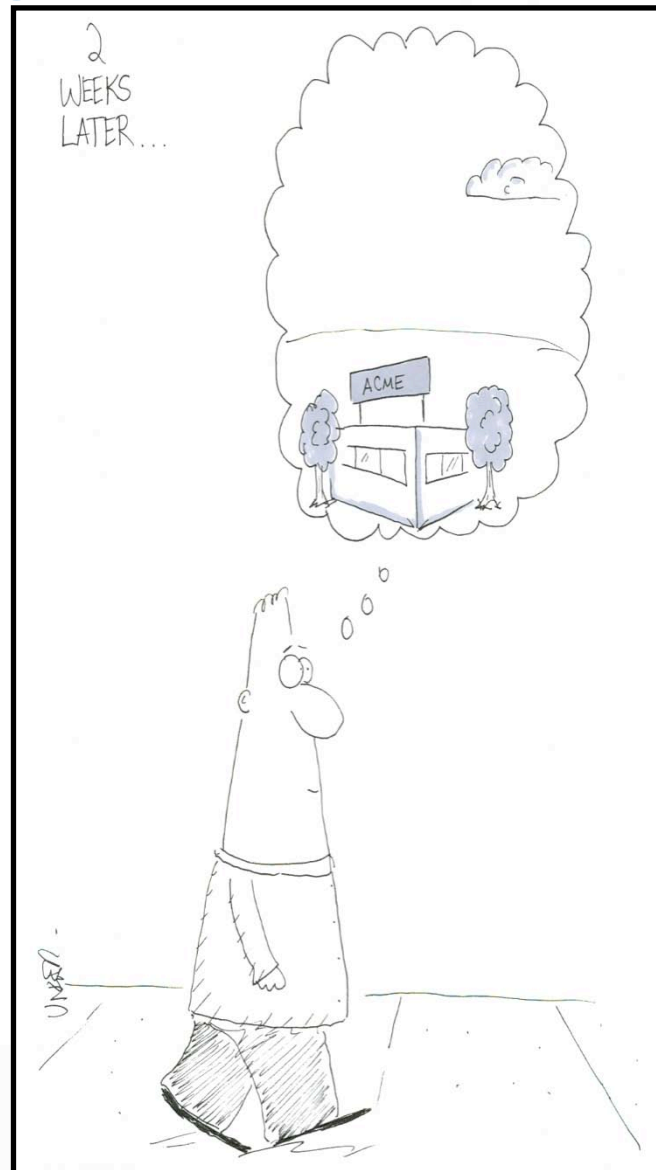
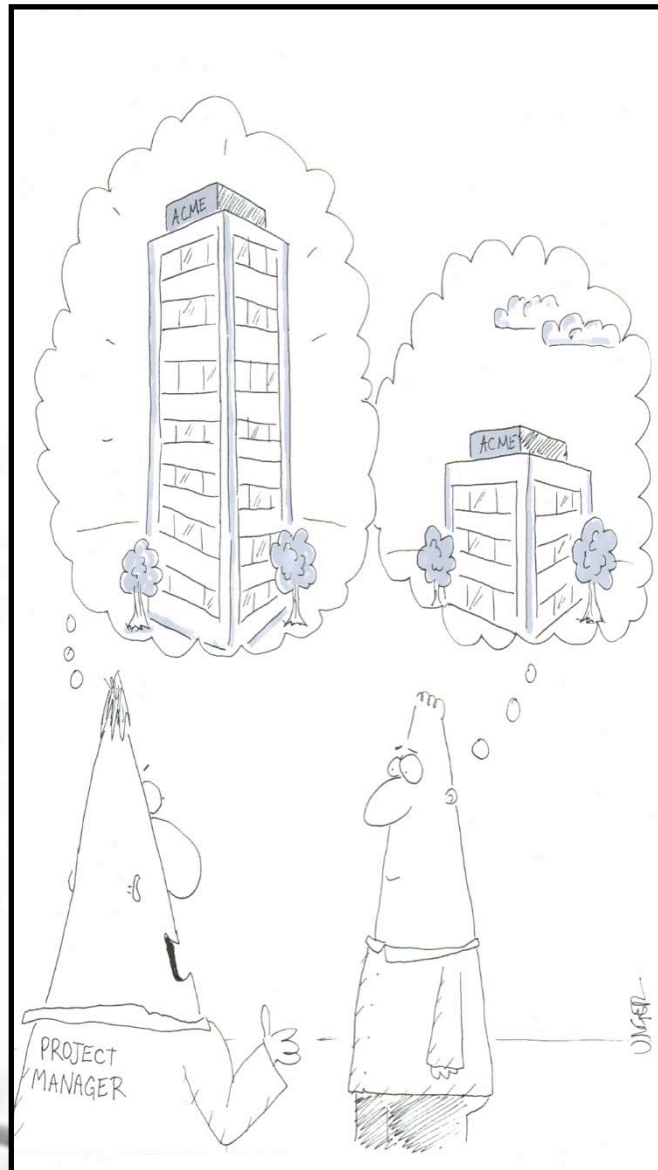
- Defines project specific procedures that involve internal and external team members

### Includes:

- Quantity/progress reporting
- Subcontract controls & procedures
- Change requests/change order procedures
- Contract document distribution
- Submittal tracking procedures
- Request for information (RFI) procedures
- Site instruction procedures
- Contract billing procedures



# Communicating an idea



# Will they communicate well with the team?

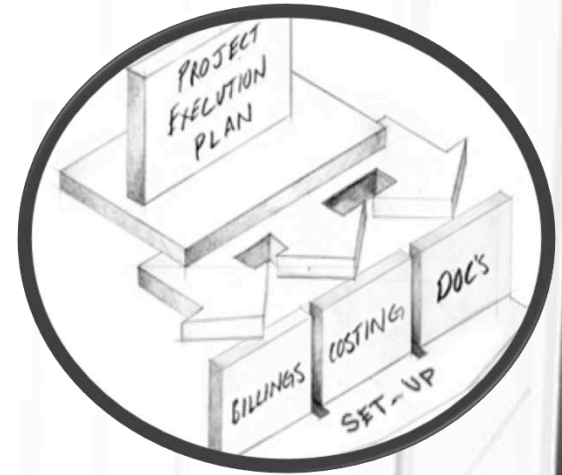
## Communications

### Value:

- Ensures that project execution is seamless and our clients understand the value you deliver

### Includes:

- Partnering
- Project meetings
- Neighborhood/stakeholder communications
- Value management plan





# Miscommunication of Ideas

When Communication isn't Clear...



**ROCK103.COM**

# Will their close-out plan be achievable?

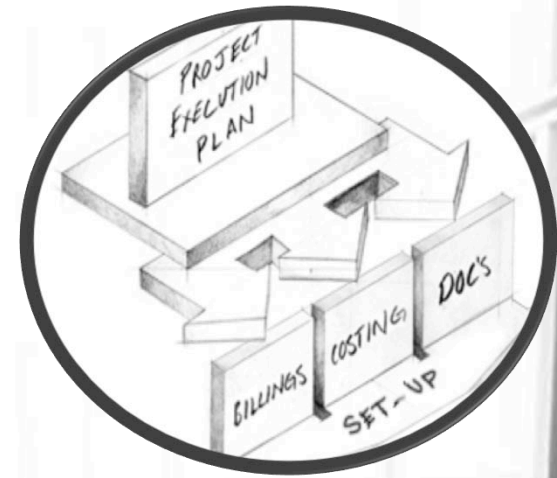
## Contract Closeout Plan

### Value:

- Effective contract closeout is essential to client satisfaction, your reputation
- Start at the initial planning phase of the project

### Includes:

- Planned start date for Closeout Planning Meetings
- Commissioning/turnover schedule



TY!

DYHAQ

