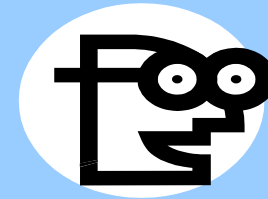
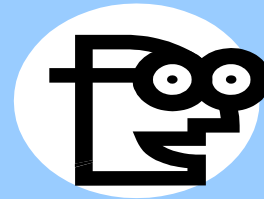
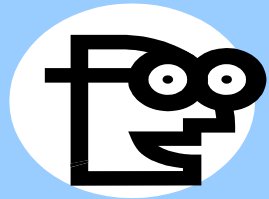




CE 401 CE Seminar
General Questions:



It's QUESTION TIME !!

How well do you write?



TCE for CE-401 Now Active

TCE for CE-401 Will Open Soon
Please take the time to respond



CE 401 CE Seminar
General Questions:

**If a prospective employer asks
during a job interview,**

“How well do you write?”

How will you respond?



Written Communications

- **Bill Black asked me during a job interview, “How well do you write?”**



Written Communications

- **Bill Black asked me during a job interview, “How well do you write?”**
- **He continued, “I ask because in our business, we sell the written word!!!!”**



Written Communications

- I did not understand his comment, and of course I said, “I write well.”



Written Communications

- I did not understand his comment, and of course I said, “I write well.” HaHaHaHa
 - At that point of my life, I had not written anything of any significance



Written Communications

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 - At that point of my life, I had not written anything of any significance
 - My Master’s Thesis was at most a rough mental outline, with nothing written down yet



Written Communications

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 - At that point of my life, I had not written anything of any significance
 - My Master’s Thesis was at most a rough mental outline, but nothing written down yet
 - And he wants to know how well I write.



Written Communications

- I did not understand his comment, and of course I said, “I write well.” HaHaHaHa
 - At that point of my life, I had not written anything of any significance
 - My Master’s Thesis was at most a rough mental outline, but nothing written down yet
 - And he wants to know how well I write.
- I have learned many things since then, and among them are:
 - Bill Black was right. Engineers sell the written word
 - Engineers who develop better communication skills will probably be more successful over time



Written Communications

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 - At that point of my life, I had not written anything of any significance
 - My Master’s Thesis was at most a rough mental outline, but nothing written down yet
 - And he wants to know how well I write.
- I have learned many things since then, and among them are:
 - Bill Black was right. Engineers sell the written word
 - Engineers who develop better communication skills will probably be more successful over time
- FWIW, I believe most of you have stronger writing skills than I had at the same stage of my life and development.

Developing communication skills is a lifelong effort



Written Communications

My Advice (FWIW)

- Understand your audience
- Know what you want to say before you begin writing (John Bachner's #1 Writing Advice)
- In a first draft, say everything you think you may want to say (John Bachner's #2 Writing Advice)
- Organize and pare down the content with subsequent drafts
- Keep a curious, questioning mind as you write and review your writing by being your biggest critic of your organization and content
- Understand that you can always improve your writing & skill
- Be very careful with email and texting to maintain proper levels of accuracy, precision, and loss prevention



Conflict Resolution Workshop

Quiz 10

Quiz 10

Range: 10-20; Average 16.8

W/ Text Historic 10-20; Average 14.8

0.067 (2 of 30) Perfect Scores on Quiz 10

All Quizzes 18 W/ Text

Range: 81-102; Average 94.6

0.511 (142 of 278) Perfect Scores

Historic Semester Average 96-103.1

Semester Average 91.4



Conflict Resolution Workshop

Discussion Group Activity

Timely Initial Posts: 85.0%			Last Update 17-Apr-26 6:34 AM				
Section 2			Week 13 Discussion Question Activity Report				
Question	Group	Leader	1	2	3	4	5
1	A	Muthukrishnan	Knerr	Muthukrishnan	O'Donnell	Torres	
1	B	Freeland	Freeland	Jordan	Kinzer	Salbego	
1	C	Temple	Adkins	Burke	Temple		
1	D	Terrill	Davis	McGinnis	Terrill		
1	E	Eilers V	Clark	Eilers V	Farmer		
1	F	Harwood	Cannon	Dunn	Harwood		
2	A	O'Donnell	Knerr	Muthukrishnan	O'Donnell	Torres	
2	B	Kinzer	Freeland	Jordan	Kinzer	Salbego	
2	C	Burke	Adkins	Burke	Temple		
2	D	McGinnis	Davis	McGinnis	Terrill		
2	E	Clark	Clark	Eilers V	Farmer		
2	F	Cannon	Cannon	Dunn	Harwood		
3	A	Knerr	Knerr	Muthukrishnan	O'Donnell	Torres	
3	B	Jordan	Freeland	Jordan	Kinzer	Salbego	
3	C	Adkins	Adkins	Burke	Temple		
3	D	Davis	Davis	McGinnis	Terrill		
3	E	Farmer	Clark	Eilers V	Farmer		
3	F	Dunn	Cannon	Dunn	Harwood		

Font Legend

non-bold	No post made, time for posting remains	non-bold	Late Post before consensus, 20% loss
Bold / Bold	Post made within Time	Bold	Post is made after consensus, 60% loss
Non-Bold Leader	No Consensus Posted, -5 Points	<i>Ital. non-bold</i>	No Post Made, 100% loss



Conflict Resolution Workshop

Discussion Group Activity

Timely Initial Posts: 90.9%			Last Update 17-Apr-26 6:34 AM				
Section 1			Week 13 Discussion Question Activity Report				
Question	Group	Leader	1	2	3	4	5
1	A	Eaton	Ballinger	Eaton	Lee	Strong	
1	B	O'bryan	Blevins	Elam	O'bryan		
1	C	Riffe	Caldbeck	Gough	Riffe	Tyler	
1	D						
1	E						
1	F						
2	A	Lee	Ballinger	Eaton	Lee	Strong	
2	B	Elam	Blevins	Elam	O'bryan		
2	C	Gough	Caldbeck	Gough	Riffe	Tyler	
2	D						
2	E						
2	F						
3	A	Strong	Ballinger	Eaton	Lee	Strong	
3	B	Blevins	Blevins	Elam	O'bryan		
3	C	Caldbeck	Caldbeck	Gough	Riffe	Tyler	
3	D						
3	E						
3	F						

Font Legend			
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Bold / Bold	Post made within Time	Bold	Post is made after consensus, 60% loss
Non-Bold Leader-No Consensus Posted, -5 Points		<i>Ital. non-bold</i>	No Post Made, 100% loss



Conflict Resolution Workshop Settlement by Group

•Section 1

401-1 Team Number: Team Name	1	2	3	Recommended Range	
				Min.	Max.
Owner	\$15,000	\$15,000			
Architect	\$7,500	\$18,000			
Geotechnical	\$7,500	\$5,000			
Contractor	\$20,000	\$12,000			

•Section 2

401-2 Team Number: Team Name	1	2	3	Recommended Range	
				Min.	Max.
Owner	\$15,000	\$15,000	\$15,000		
Architect	\$12,000	\$12,750	\$12,000		
Geotechnical	\$3,000	\$2,250	\$3,000		
Contractor	\$20,000	\$20,000	\$20,000		



Conflict Resolution Workshop

Question 1: Change Orders

QUESTION 1

In the case, the contractor performed the blasting work in order to complete the excavation before submitting the change order request for the additional money to conduct the blasting.

In general respect to change order procedures for any project, assuming the change order request is not generated by an owner-initiated change in the work scope, and assuming the owner has NOT delegated change order APPROVAL authority to the design team, please address the following:

1) In 2 to 3 sentences, explain the role of design team members in reviewing and processing a change order request submitted by a contractor including optional actions that the design team members may take.

2) In 2 to 3 sentences, explain why the owner or the owner's duly authorized representative should approve a change order request PRIOR TO the contractor's performance of work.

A	Eaton	A	Muthukrishna
B	O'bryan	B	Freeland
C	Riffe	C	Temple
D		D	Terrill
E		E	Eilers V
F		F	Harwood



Conflict Resolution Workshop

Closing Statement

Change Order: Was It Approved or Not?

- 1) The role of the prime design professional in reviewing and processing a change order request submitted by the contractor.**



Conflict Resolution Workshop

Closing Statement

Change Order: Was It Approved or Not?

- 1) The role of the prime design professional in reviewing and processing a change order request submitted by the contractor. The PDP's role is to make initial assessment of a Change Order Request based on the situation with the project and the impact on schedule and budget. If COR is appropriate, the PDP passes it on to the owner for approval, and if COR is not appropriate, the PDP returns it to the contractor. There may be situations when the PDP should speak to the owner about a questionable COR.**
- 2) Why a change order request should have approval by the owner, or the owner's duly authorized representative prior to performing the work.**



Conflict Resolution Workshop

Closing Statement

Change Order: Was It Approved or Not?

- 1) The role of the prime design professional in reviewing and processing a change order request submitted by the contractor. The PDP's role is to make initial assessment of a Change Order Request based on the situation with the project and the impact on schedule and budget. If COR is appropriate, the PDP passes it on to the owner for approval, and if COR is not appropriate, the PDP returns it to the contractor. There may be situations when the PDP should speak to the owner about a questionable COR.**
- 2) Why a change order request should have approval by the owner, or the owner's duly authorized representative prior to performing the work. Because seeking approval after the work has been started (or completed) is ripe for creation of disputes, and since the contract is between the owner and the contractor, only the owner and contractor can amend it.**



Conflict Resolution Workshop

Question 2: Means and Methods

QUESTION 2

The dispute in the case arose when the contractor's excavating equipment was too small to excavate the site due to rock floaters within the soil matrix.

1 In 2 to 3 sentences, citing facts of this case, which party involved in our project **SELECTED** the means and methods used to excavate the site?

2 In a general sense for construction (not just our case), explain in 2 to 3 sentences what a contractor should do when the means and methods that the contractor selected are ineffective or inefficient.

3 In a general sense (not just our case), describe in 2 to 3 sentences the circumstances that would entitle a contractor to a change order when the selected means and methods are ineffective or inefficient.

A	Lee
B	Elam
C	Gough
D	
E	
F	

A	O'Donnell
B	Kinzer
C	Burke
D	McGinnis
E	Clark
F	Cannon



Conflict Resolution Workshop

Closing Statement

Means and Methods vs Change Orders

- 1 Which party involved in our project was responsible for selecting the means and methods used to accomplish the excavation?**



Conflict Resolution Workshop

Closing Statement

Means and Methods vs Change Orders

- 1 Which party involved in our project was responsible for selecting the means and methods used to accomplish the excavation? **The contractor chose the means and methods. Design Professionals should avoid specifying the means and methods.****
- 2 Explain what that party should do when the selected means and methods are not effective or efficient.**



Conflict Resolution Workshop

Closing Statement

Means and Methods vs Change Orders

- 1 Which party involved in our project was responsible for selecting the means and methods used to accomplish the excavation? The contractor chose the means and methods. Design Professionals should avoid specifying the means and methods.**
- 2 Explain what that party should do when the selected means and methods are not effective or efficient. When a contractor's means and methods are not effective or efficient, the contractor should consider changing means and methods to improve effectiveness and efficiency. A contractor does NOT need anyone's permission to change means and methods unless the contract specifies the M&M.**
- 3 Explain when the contractor may be entitled to a change order because the selected means and methods cannot complete the excavation.**



Conflict Resolution Workshop

Closing Statement

Means and Methods vs Change Orders

- 1 Which party involved in our project was responsible for selecting the means and methods used to accomplish the excavation? The contractor chose the means and methods. Design Professionals should avoid specifying the means and methods.**
- 2 Explain what that party should do when the selected means and methods are not effective or efficient. When a contractor's means and methods are not effective or efficient, the contractor should consider changing means and methods to improve effectiveness and efficiency. A contractor does NOT need anyone's permission to change means and methods unless the contract specifies the M&M.**
- 3 Explain when the contractor may be entitled to a change order because the selected means and methods cannot complete the excavation. A contractor is entitled to a change order when the owner changes the scope of the project; the contractor encounters a "Changed Condition;" or if the contract specifies the M&M.**



Conflict Resolution Workshop

Question 3: Reasons To Compromise

QUESTION 3

In the Church of Barrish County case, the Architect, Geotechnical Engineer and Contractor realized that they needed the owner to contribute financially in order to find a fair and reasonable settlement of the disputed change order. Furthermore, the Architect, as the Prime Design Professional, needed to show the owner that a fair and reasonable resolution is in the owner's interest even though the owner did not cause the dispute to occur.

1. Identify at least 3 reasons why it is in the owner's interest to help the other parties resolve this dispute, even if that meant the owner must pay additional money toward that settlement.
2. For each identified reason, explain in 1 to 2 sentences why the reason makes it in the owner's interest to get this dispute resolved.

A	Strong	A	Knerr
B	Blevins	B	Jordan
C	Caldbeck	C	Adkins
D		D	Davis
E		E	Farmer
F		F	Dunn



Conflict Resolution Workshop

Closing Statement

Means and Methods vs Change Orders

1 Identify at least 3 reasons why it is in the owner's interest to help the other parties resolve this dispute, even if that meant the owner must pay additional money toward that settlement.

- 1. Unjust Enrichment claim by the contractor (supported by the architect)**
- 2. Cost of Litigation (should the dispute require adjudication)**
- 3. Cost of Delay (should the contractor pull out)**



Conflict Resolution Workshop

Closing Statement

Means and Methods vs Change Orders

2 For each identified reason, explain in 1 to 2 sentences why the reason makes it in the owner's interest to get this dispute resolved

- 1. Unjust Enrichment: The owner believes it has a sound defense against this claim, but the owner is not assured to win in court. Therefore, it is in the owner's interest to settle rather than risk losing this argument should the dispute go to court.**
- 2. Cost of Litigation: Litigation would likely consume vast resources and given the possibility of losing the Unjust Enrichment argument, it is better for the owner to pay less now to help resolve this matter rather than risk paying more to take this to court and then lose in court.**
- 3. Cost of Delay: There is some risk that the contractor could elect to breach the contract rather than continue in the face of this change order denial. Should this happen, the owner must rebid the project at great risk of a substantially higher contract the second time around. It is in the owner's interest to avoid this possibility.**



Conflict Resolution Workshop

Closing Statement Topics

- **Issues Raised During Workshop**
- **Financial Considerations Related To Party's Risk**
- **Financial Considerations of Contractor's Change Order Request**
- **The CRW Emulates Reality**
- **What Would Be A Reasonable Settlement?**
- **Some Parting Advice About Conflict Resolution**



Conflict Resolution Workshop Closing Statement

Issues Raised During Workshop

- **Procurement:** By QBS or By Bidding?
- **Site Conditions:** Is It Rock or Mostly Soil?
- **Change Order:** Was It Approved or Not?
- **Boring Layout:** Was It Adequate or Not?
- **Geot Monitoring:** Does Advice Create Duty?



Conflict Resolution Workshop

Closing Statement

Procurement Method: QBS or Competitive Bidding?

- **Owner clearly did not use competitive bidding to select Keystone as its prime design professional**
 - **Owner Used QBS to hire Keystone**
 - **Determined Keystone is most qualified**
 - **Negotiated a contract with Keystone**
- **Keystone did not use QBS to select Geo-Ter as the geotechnical engineer**
 - **Keystone used Competitive Bidding to procure Geotechnical Engineering services**
 - **Keystone specified the number and location of borings so each bidder would compute its bid based on the same scope of work (a fiction)**
 - **When Keystone insisted on a “no frills” approach, it sent a signal of its intention to select the cheapest proposal (bid).**



Conflict Resolution Workshop

Closing Statement

Procurement Method: QBS or Competitive Bidding?

- **Did all geotechnical engineers contacted by Keystone submit bids in compliance with Keystone's Request For Bids?**
 - We don't know that all did, but we know that Geo-Ter did! Presumably, others did as well, but
 - At least one firm, Earth Specialists, Inc., complained about the approach!
 - Who is Earth Specialists, Inc. and what is its relationship with Keystone?
 - What did Earth Specialists, Inc. do?
 - How did Keystone react to the Earth Specialists, Inc. submittal?
- **Way back in week 1, we spent significant time discussing QBS and Competitive Bidding**
 - Does anyone recall the point of that discussion?
 - That discussion was not hot air used to consume time
 - Keystone's use of bidding to hire the geotechnical engineer contributed to the creation of this dispute.



Conflict Resolution Workshop

Closing Statement

Site Conditions: Is It Rock or Mostly Soil?

- **Depends on how one defines rock**
 - **In this case, the contract did not define rock, and**
 - **Definition of Rock was left to the interpretation of the parties and eventually the court**
- **Rock Definition depends Upon the Parties' Agenda, which vary:**
 - **Geotechnical Engineer Says it is mostly soil, which is consistent with his experience that the rock can be excavated with the soil**
 - **Contractor Says it is rock that can't be excavated with the soil because his small equipment can't remove the rock and soil together unless the rock is blasted. In addition, the rock is an unanticipated changed condition**
 - **Architect's Point of View largely shaped by the Architect's response to the contractor upon encountering the rock, and hearing the Contractor's statements**



Conflict Resolution Workshop

Closing Statement

Change Order: Was It Approved or Not?

- **Hinges On Contract between Owner/Contractor**
 - Does it require a writing? **Typical Contract Condition**
 - Should It be Approved Before the Work Is Started? **Typical Contract Condition**
 - Does it require the Owner's approval, or Can Architect Commit the Owner? **Owner approval is typical, but owner could delegate this authority to the Architect**
- Did Architect Direct the Contractor to proceed with the blasting? **Yes, based on the facts in the case**
- Did the Owner delegate the authority to amend this contract to the Architect? **Not in this case, but the owner could have.**



Conflict Resolution Workshop

Closing Statement

**Change Order:
Was It Approved or Not?**

- **Architect Would like to Blame Gordon Atley for giving approval without authority, BUT!!!**
 - **Atley not acting on his own because we know that he notified Peter Armand about CO Details prior to the contractor starting the work**
 - **If Armand had a problem with the Contractor's proposal,**
 - **he should have so directed Atley, and**
 - **Armand's message to Carpo would have been different.**
- **Architect (Armand) responded to the written COR by sending it to the owner, an explicit act of acceptance.**
- **If the COR is not acceptable, Architect (Armand) should usually send it back to the contractor. Note, sometimes the PDP may want to discuss an unacceptable COR with the owner.**



Conflict Resolution Workshop Closing Statement

Change Order:

Was It Approved or Not?

- **Architect should analyze the technical and financial impacts of the COR before deciding to forward the written COR to the Owner, but**
- **Architect did not analyze the technical or financial impacts of the COR until the owner refused to approve it**



Conflict Resolution Workshop

Closing Statement

Boring Layout: Was It Adequate or Not?

- May or may not be adequate in legal sense and
- During negotiations, the issues to consider are:
 - Architect specified the scope, but got advice afterwards that the scope was inadequate
 - Geo-Ter accepted the specified scope. Even though Geo-Ter was not pleased with it Geo-Ter Said the scope is acceptable
 - “Acceptable” is not necessarily the same as “Adequate (Std of Care)”?
- If litigated, this would be an issue for the jury to decide
 - IF the jury concludes the scope was inadequate, it is a violation of the Std of Care
 - Owner and Contractor potentially damaged by an inadequate scope



Conflict Resolution Workshop

Closing Statement

Geotechnical Monitoring: Does Advice Create Duty?

- **Geo-Ter Recommended its Presence On Site To Monitor Construction**
- **Does the Geo-Ter's Recommendation To Be On Site Create A Duty for Geo-Ter To Be There?**
 - **Some Architects and Contractors have argued that the Geotechnical Engineer had a duty to be on site and blame the dispute on the geotechnical's absence.**
 - **Geotechnical Engineer says he was not on site because no one hired him to be there**



Conflict Resolution Workshop

Closing Statement

Geotechnical Monitoring: Does Advice Create Duty?

- **Recommendations Do Not Create A Legal Duty**
 - **The Giver has no duty to unilaterally implement the advice**
 - **The Recipient has no duty to follow the advice and can implement the advice or ignore it**
- **Be Careful If Someone Tries To Find such a Duty Created by a Recommendation**



Conflict Resolution Workshop Closing Statement

Financial Considerations Related To Party's Risk

Party Name	Revenue From Project	Profit/Gain From Project
Geotechnical	\$3,000	\$150 to \$300

- **Geotechnical Engineer**

- **Total Fee = \$3,000**

- **Profit on Project in the \$150 to \$300 range**



Conflict Resolution Workshop Closing Statement

Financial Considerations Related To Party's Risk

Party Name	Revenue From Project	Profit/Gain From Project
Geotechnical	\$3,000	\$150 to \$300
Architects	\$308,000	\$0

•Poor Poor Pitiful Architects Agreed to Work At Cost, No Profit

- Usual Fee, with profit, 6-10%, Use 6%; \$342,000
- Likely Profit, 5-10% of Revenue, Use 10%; \$34,000
- Owner Paid Architect at least \$308,000 for job



Conflict Resolution Workshop

Closing Statement

Financial Considerations Related To Party's Risk

Party Name	Revenue From Project	Profit/Gain From Project
Geotechnical	\$3,000	\$150 to \$300
Architects	\$308,000	\$0
Contractor	\$5,200,000	\$260,000 to \$520,000

- **Contractor Bid Job To Make Profit**
 - Bid = \$5,200,000
 - Projected Profit, 5-10%, Use 5%; \$260,000 at least
 - Change Orders Can Help Increase Profits



Conflict Resolution Workshop Closing Statement

Financial Considerations Related To Party's Risk

Party Name	Revenue From Project	Profit/Gain From Project
Geotechnical	\$3,000	\$150 to \$300
Architects	\$308,000	\$0
Contractor	\$5,200,000	\$260,000 to \$520,000
Owner	\$15,600,000	\$5,200,000

- **Owners do not spend for new facilities unless a Return On Their Investment Is Likely**
 - **Can Invest funds in tax free, no risk bonds, 2-3%**
 - **Would not sell bonds unless ROI enough to pay taxes AND increase yield to offset assumed risk., say 10% min**



Conflict Resolution Workshop Closing Statement

Financial Considerations Related To Party's Risk

Party Name	Revenue From Project	Profit/Gain From Project
Geotechnical	\$3,000	\$150 to \$300
Architects	\$308,000	\$0
Contractor	\$5,200,000	\$260,000 to \$520,000
Owner	\$15,600,000	\$5,200,000

•Construction In US Assumes Rational Relationship Between Potential Gain and Level of Risk

- Owner Stands To Benefit Most, Must Accept Role as the Primary Risk Taker for HIS Project
- If Industry changes risk allocation and Shifts Owner Risk To Contractors or Designers, Project Cost must rise significantly



Conflict Resolution Workshop

Closing Statement

Financial Considerations For Change Order Request

Transaction	Cost	Total Revenue	Profit (Loss)
Geotechnical Estimate	\$40,000	\$45,000	\$5,000

- **Geotech Engineer Provided Estimate for Excavation**
 - Assumes the most efficient method of excavation, e.g. Rock Removed with Soil using large excavators
 - Most Efficient method to excavate this site should cost about \$45,000
 - \$40,000 min Cost and
 - \$5,000 max profit,
 - Less efficient excavation methods will cost a contractor more to complete the work



Conflict Resolution Workshop

Closing Statement

Financial Considerations For Change Order Request

Transaction	Cost	Total Revenue	Profit (Loss)
Geotechnical Estimate	\$40,000	\$45,000	\$5,000
Original Bid	\$40,000	\$30,000	(\$10,000)

- **Contractor Bid \$30,000 for excavation work**
 - If Rocks are NOT there, the contractor can complete the work and make a small profit doing so.
 - If Rocks are there, the work will cost the contractor at least \$40,000 as stated by the Geotechnical Engineer.
 - When Rocks are encountered, the bid locks in a loss for excavation of at least \$10,000



Conflict Resolution Workshop

Closing Statement

Financial Considerations For Change Order Request

Transaction	Cost	Total Revenue	Profit (Loss)
Geotechnical Estimate	\$40,000	\$45,000	\$5,000
Original Bid	\$40,000	\$30,000	(\$10,000)
Change Order Request	\$20,000	\$50,000	\$30,000

•Contractor encounters rock and asks for \$50,000 Extra to blast and remove the rock fragments.

- Keystone, Gordon Atley directs Contractor to do this blasting**
- When excavation done, contractor submits Change Order Request for \$50,000**
- However, Contractor's actual cost to do blasting is \$20,000, leaving \$30,000 Profit in Change Order.**



Conflict Resolution Workshop

Closing Statement

Financial Considerations For Change Order Request

	Cost	Total Revenue	Profit (Loss)
Geotechnical Estimate	\$40,000	\$45,000	\$5,000
Original Bid	\$40,000	\$30,000	(\$10,000)
Change Order Request	\$20,000	\$50,000	\$30,000
Bid With Change Order	\$60,000	\$80,000	\$20,000

- **Contractor attempting to convert \$10,000 bid loss into \$20,000 profit for excavation work with a single change order**
- **Did Contractor make honest bidding error or was this a Low-Ball Bid?**



Conflict Resolution Workshop

Closing Statement

Financial Considerations For Change Order Request

	Cost	Total Revenue	Profit (Loss)
Geotechnical Estimate	\$40,000	\$45,000	\$5,000
Original Bid	\$40,000	\$30,000	(\$10,000)
Change Order Request	\$20,000	\$50,000	\$30,000
Bid With Change Order	\$60,000	\$80,000	\$20,000

- **Contractor attempting to convert \$10,000 bid loss into \$20,000 profit for excavation work with a single change order**
- **Did Contractor make honest bidding error or was this a Low-Ball Bid? Mistakes are no excuse in Contract Law; Intent is even worse.**



Conflict Resolution Workshop Closing Statement

The CRW Emulates Reality

- **Construction Disputes Involve multiple parties, each with own point of view and agenda**
- **Importance of Documentation**
- **Role of Bias In Creating the Disputes**



Conflict Resolution Workshop

Closing Statement

Importance of Documentation

- **Contractor knew that he may need to justify his “no rock” bid assumption**
 - Contractor documented the call for a future claim to justify his “no rock” bid assumption
 - Contractor plans for rock removal change order during bidding phase
- **Architect too busy to document the call**
 - Phone call was intrusion into Architect’s workday
 - Diversion from paying work at hand to address job that is done, not billable time.
- **Now They Have Divergent Memories Of Same Event**



Conflict Resolution Workshop

Closing Statement

Importance of Documentation

- **Contractor uses call to justify change order**
 - **Architect told Contractor to only plan to remove specific rock shown on boring logs, none shown.**
 - **Architect told Contractor he could not call Geo-Ter about the Rock because Geo-Ter No longer on the Job.**
 - **Bid based on NO ROCK; There is rock everywhere**
- **Architect has no current memory of the call, thinks Contractor is making up the substance**



Conflict Resolution Workshop

Closing Statement

Importance of Documentation

- **Put your decisions and instructions in writing**
 - **Human Memory is weak;**
 - **Person with knowledge may not be available to firm when knowledge recall is needed**
 - **Documentation can provide a strong defense**
- **Side Note- Like the Contractor's Memo to its Bid File, the Architect and Geot Engr also have documents from their files that other parties do not know about.**



Conflict Resolution Workshop

Closing Statement

Importance of Documentation

- **Raises Bigger Issue**

- How should a design professional receive, process, and respond to bidder questions about the bid package, scope of work, intent of the documents, etc. during the bidding phase?



Conflict Resolution Workshop

Closing Statement

Importance of Documentation

- **Raises Bigger Issue**

- How should a design professional receive, process, and respond to bidder questions about the bid package, scope of work, intent of the documents, etc. during the bidding phase?

- Handle unilaterally by email in real time?



Conflict Resolution Workshop

Closing Statement

Importance of Documentation

- **Raises Bigger Issue**

- **How should a design professional receive, process, and respond to bidder questions about the bid package, scope of work, intent of the documents, etc. during the bidding phase?**

- **Handle unilaterally by email in real time?**

- **Handle unilaterally by phone in real time?**



Conflict Resolution Workshop

Closing Statement

Bid Phase Questions

- **Never Conduct unilateral discussions with a bidder (email, phone, ...)**
 - Direct all bidders to submit questions in writing
 - If question comes by phone, do not discuss, restate policy regarding written questions only
 - When written questions arrive, research question before responding, and
 - Provide complete answer in writing to all bidders



Conflict Resolution Workshop

Closing Statement

What Would Be A Reasonable Settlement?

In 2 or 3 sentences, explain why the owner's financial contribution was necessary to achieve a fair and reasonable settlement of this conflict.

- 1. The owner did not cause this dispute**
- 2. However, the size of this dispute makes it very difficult, if not impossible, for the other parties to resolve this conflict without the owner's help.**
- 3. The owner said he would not pay, but people often say such things under stress, but can be brought along when given powerful reasons for contributing**
- 4. The owner stands to lose the most if this conflict cannot be resolved making it in the owner's interest to help the parties find a fair and reasonable resolution.**



Conflict Resolution Workshop

Closing Statement

What Would Be A Reasonable Settlement?

•Owner is naïve

- Not owner's fault because the owner does not do construction, and
- The Architect did not educate the owner about risk of construction.
- Naïve owners:
 - Begin projects with no money to spare
 - Believe their project will go just as planned
 - Did not know what could go wrong or what to do

•Owner Is High Risk

- Project run by committee for non-profit organization – See Excerpts from A/E Risk Review
- Architect should have been more cautious and informed the owner about what risks are most likely to appear, and
- Architect should have advised the Owner to mitigate those risks by:
 - Authorizing a more complete design service, and
 - Providing contingency funding for Construction Phase



Conflict Resolution Workshop

Closing Statement

What Would Be A Reasonable Settlement?

UNJUST ENRICHMENT ARGUMENT

- Owner looking for something for nothing
- Land and Rocks belong to the Owner
 - Project can't be completed without removing the rock
 - Contractor's bid did not include money to remove rock
 - To remove rock, owner had to pay something, but he wanted contractor to remove them for free
 - Unjust Enrichment-Trying To Get Rock Removal for Nothing
- Contractor asking for more money than necessary to move rock
 - Owner should pay something to have the rock removed
 - Negotiating Issue: How much should the owner pay?



Conflict Resolution Workshop

Closing Statement

What Would Be A Reasonable Settlement?

- **Unjust Enrichment not only reason owner should pay:**
 - **To avoid cost of litigation-Could be \$20,000 or more**
 - **To avoid cost of delay created by contractor default-**
 - **Owner must seek new bids facing a risk of much higher bids**
 - **Owner will incur higher financing cost, inflationary impact on labor, materials**
 - **To use this dispute to strengthen team unity**
 - **To repair Owner's lost trust due to Architect's Breach of Friend's Trust**
 - **Owner entrusted most important project to his friend**
 - **His friend had mismanaged the project, let his good friend down**
 - **Architect needs to take initiative and apologize to his friend**
 - **Relationship should be a high priority to each**



Conflict Resolution Workshop

Closing Statement

What Would Be A Reasonable Settlement?

- **If Architect makes all 5 points, the owner will pay \$15,000 toward change order**
 - **Leaves \$35,000 for the others to resolve instead of full \$50,000**
 - **Makes Settlement more likely and possible**
- **If Architect only makes some of the 5 points, Owner Pays less.**
 - **\$15,000 is maximum owner will pay**
 - **If Owner pays as little as \$5,000, would be acceptable**



Conflict Resolution Workshop Settlements by Groups

•Section 1

401-1 Team Number: Team Name	1	2	3	Recommended Range Min. Max.
Owner	\$15,000	\$15,000		5,000 To 15,000
Architect	\$7,500	\$18,000		
Geotechnical	\$7,500	\$5,000		
Contractor	\$20,000	\$12,000		

•Section 2

401-2 Team Number: Team Name	1	2	3	Recommended Range Min. Max.
Owner	\$15,000	\$15,000	\$15,000	5,000 To 15,000
Architect	\$12,000	\$12,750	\$12,000	
Geotechnical	\$3,000	\$2,250	\$3,000	
Contractor	\$20,000	\$20,000	\$20,000	



Conflict Resolution Workshop

Closing Statement

What Would Be A Reasonable Settlement?

- **Architect is Prime Problem Maker in Case:**
 - **Close relationship with owner without strong defensive measures**
 - **Agreed to work for no profit, no cushion for error**
 - **Heavy Workload, reliance on long hours, inexperienced personnel**
 - **Obtain Geotech services by competitive bidding**
 - **Failure to follow Geo-Ter's recommendations**



Conflict Resolution Workshop

Closing Statement

What Would Be A Reasonable Settlement?

- **If Others Insist that Architect Pay Full Share:**
 - **Settlement probably not possible because Architect had no cushion**
 - **Others should have been aware of risk created by Architect, warning signals all present**
- **Reasonable for Architect to contribute between \$10,000 to \$20,000 toward settlement**



Conflict Resolution Workshop Settlements by Groups

•Section 1

401-1 Team Number:	1	2	3	Recommended Range	
Team Name				Min.	Max.
Owner	\$15,000	\$15,000		5,000 To	15,000
Architect	\$7,500	\$18,000		10,000 To	20,000
Geotechnical	\$7,500	\$5,000			
Contractor	\$20,000	\$12,000			

•Section 2

401-2 Team Number:	1	2	3	Recommended Range	
Team Name				Min.	Max.
Owner	\$15,000	\$15,000	\$15,000	5,000 To	15,000
Architect	\$12,000	\$12,750	\$12,000	10,000 To	20,000
Geotechnical	\$3,000	\$2,250	\$3,000		
Contractor	\$20,000	\$20,000	\$20,000		



Conflict Resolution Workshop

Closing Statement

What Would Be A Reasonable Settlement?

- **Geot Engineer Not responsible for this dispute:**
 - **If recommendations followed, dispute would not occur**
 - **But, Geot Report could have included stronger warnings, been better prepared**
 - **Geot Eng'r's hands not clean either on related issue**
 - **May need to pay something to avoid litigation**
- **Reasonable for Geot. Engr. to contribute between \$0 to \$5,000 toward settlement**



Conflict Resolution Workshop Settlements by Groups

•Section 1

401-1 Team Number: Team Name	1	2	3	Recommended Range Min. Max.
Owner	\$15,000	\$15,000		5,000 To 15,000
Architect	\$7,500	\$18,000		10,000 To 20,000
Geotechnical	\$7,500	\$5,000		0 To 5,000
Contractor	\$20,000	\$12,000		

•Section 2

401-2 Team Number: Team Name	1	2	3	Recommended Range Min. Max.
Owner	\$15,000	\$15,000	\$15,000	5,000 To 15,000
Architect	\$12,000	\$12,750	\$12,000	10,000 To 20,000
Geotechnical	\$3,000	\$2,250	\$3,000	0 To 5,000
Contractor	\$20,000	\$20,000	\$20,000	



Conflict Resolution Workshop

Closing Statement

What Would Be A Reasonable Settlement?

- **Contractor either made bidding mistake or submitted a low-ball bid:**
 - **Geot Report was professional, but not idiot proof**
 - **Contractor attempts to convert \$10,000 bid loss to \$20,000 profit through this change order is suspicious at best**
 - **Other could argue that a \$30,000 contribution would keep Contractor on same footing as its original bid**
- **Reasonable for Contractor to contribute between \$15,000 to \$25,000 toward settlement**



Conflict Resolution Workshop Settlements by Groups

•Section 1

401-1 Team Number:	1	2	3	Recommended Range	
Team Name				Min.	Max.
Owner	\$15,000	\$15,000		5,000 To	15,000
Architect	\$7,500	\$18,000		10,000 To	20,000
Geotechnical	\$7,500	\$5,000		0 To	5,000
Contractor	\$20,000	\$12,000		15,000 To	25,000

•Section 2

401-2 Team Number:	1	2	3	Recommended Range	
Team Name				Min.	Max.
Owner	\$15,000	\$15,000	\$15,000	5,000 To	15,000
Architect	\$12,000	\$12,750	\$12,000	10,000 To	20,000
Geotechnical	\$3,000	\$2,250	\$3,000	0 To	5,000
Contractor	\$20,000	\$20,000	\$20,000	15,000 To	25,000



Conflict Resolution Workshop

Closing Statement

Case Overview

- **Don't try to bully others by screaming, speaking over them, etc.**
 - **Some attorneys advocate this approach**
 - **Some attorneys seek to maximize their own gain through your disputes.**
- **Your Lawyer is an advisor, should not dictate your actions:**
 - **If you do not agree with his advice, tell him so**
 - **If you can't come to terms, seek another lawyer**



Conflict Resolution Workshop

Closing Statement

Case Overview

- **Don't try to minimize your costs by trying to get others to pay more.**
 - That is Win-Lose approach
 - Win-Lose often degenerates into Lose-Lose
- **You can minimize costs by resolving problems quickly and amicably for reasonable amounts**
 - Before mole hills grow into mountains
 - Focus on long term cost of dispute vs. cost to resolve



Conflict Resolution Workshop

Closing Statement

Case Overview

- **What About Justice?**

- **All parties in case contributed in some manner to dispute**
- **Not a case in which a party has clean hands, i.e. done nothing wrong**
- **Pragmatic business decisions needed in these cases**
- **Do not yield to legalized Extortion if your hands are indeed clean and you can afford to fight it**



Conflict Resolution Workshop

Closing Statement

Case Overview

- **Go to the Table with goal of finding a solution (finding common ground):**
 - **Remain Calm/Professional**
 - **Do not get caught in a slugfest**
 - **Separate yourself from the emotionalism to see the big picture more clearly**
 - **Often you can lead the group away from the edge of the cliff.**



Conflict Resolution Workshop

Grades for Workshop

•Section 1

Recommended Range		Team Number:	1		2		3	
Min.	Max.	Team Name						
5000	15000	Owner	\$15,000	100.0%	\$15,000	100.0%		0.0%
10000	20000	Architect	\$7,500	75.0%	\$18,000	100.0%		0.0%
0	5000	Geotechnical	\$7,500	50.0%	\$5,000	100.0%		100.0%
15000	25000	Contractor	\$20,000	100.0%	\$12,000	80.0%		0.0%
		Team 1 Grade	109	Lawyer Grade	113	Team 2 Grade	117	Team 3 Grade

•Section 2

Recommended Range		Team Number:	1		2		3	
Min.	Max.	Team Name						
5000	15000	Owner	\$15,000	100.0%	\$15,000	100.0%	\$15,000	100.0%
10000	20000	Architect	\$12,000	100.0%	\$12,750	100.0%	\$12,000	100.0%
0	5000	Geotechnical	\$3,000	100.0%	\$2,250	100.0%	\$3,000	100.0%
15000	25000	Contractor	\$20,000	100.0%	\$20,000	100.0%	\$20,000	100.0%
		Team 1 Grade	120	Lawyer Grade	120	Team 2 Grade	120	Team 3 Grade



Conflict Resolution Workshop

Closing Statement

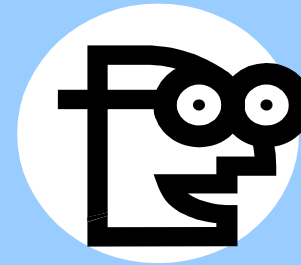
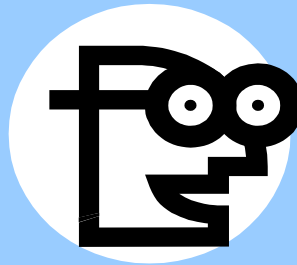
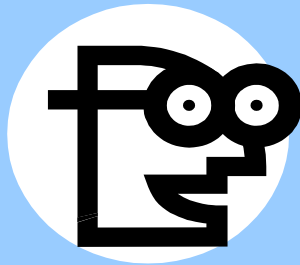
This case was developed based on the facts and circumstances in Case History 21.

Owner was changed from a school board to a church to emphasize additional client selection issues



Conflict Resolution Workshop

Closing Statement



It's QUESTION TIME !!