# Design Claims Expose: "Change" Happens Crises Are Avoidable

David Ericksen
Severson & Werson
May 2014



# Abbreviated Services Collateral Changes





### Value Engineering Substitutions





#### Real World Realities...

- Few projects unfold as "planned"
  - (if there even was a plan)
- The Successful Identify, Manage, & Lead Change
- The Successful Sometimes Even Reject Change
- Victims of Change Receive & Retreat



### Agenda

- Project Planning as a Change Management Platform
- Contain the Change in Contract
- Identifying Change of Significance
- Tools & Procedures for Change Analysis & Action
- Change Management Applied in the Real World
  - Clients
  - Contracts
  - Program



### The Planning Imperative

"He who fails to plan is planning to fail"

Winston Churchill, WWII



### Project Planning in the Real World

- Project planning not considered a valuable task
- When we plan, we do so for the best and "unforeseen" things happen
- The more narrow a system, the easier it is to disrupt
- Project plans often do not consider risk
- Too often the response to change is "what happened", not the new plan



## Without a Plan, There is No Change: Three Levels of Project Planning

- 1. Baseline Project Plan for Core Projects
- 2. Project Specific Plan Tailored for Project Variations
- 3. Contingency or Risk Planning



### Core Project Specific Planning Issues: Look Before You Leap!

- Client Selection
- Project Selection with a Scope for Success
- Team Selection
  - Design Team
  - Owner Team
- Risk Assessment vs. Economic/Strategic Benefit
- A Contract Framed Plan for Project Delivery



### Project Plans as Contract and Performance Guides

- The <u>preliminary</u> Project Plan is the initial guide to contract drafting and negotiation
- The <u>initial</u> project plan should reflect and conform to the contract realities
- The <u>living</u> project plan should guide performance and evolve in sync and in response to the project evolution and the services required and delivered.



### The Making of a Contract

#### **Guiding Principles:**

- A Contract is to represent "a meeting of the minds"
- A Binding Contract Requires Three Elements:
  - Offer
  - Acceptance
  - Consideration



### Contain the Change

#### Relationship:

- No assignments it is a relationship.
- To the client, not third parties.

#### Role:

- Defined & complete scope of work.
- Assumptions.
- No reductions in scope.

#### Project:

- Changes & substitutions.



### Preserve the Relationship

- This Agreement and all of the Obligations and Services set forth herein are intended for the sole use and benefit of the Parties and are not intended to create any third party rights or benefits.
- Neither Party may assign this Agreement or any of Consultant's work product without the written consent of both parties.



### Preserve the Role Inclusion & Containment

- Consultant's services shall be limited to those expressly set forth above, and Consultant shall have no other obligations or responsibilities for the Project except as agreed to in writing or as provided in this Agreement.

- All of Consultant's communications, actions, and documentation relative to the Project shall be covered by this Agreement.



# Preserve the Role Reduced Scope Impact Protections

Consultant's commitments as set forth in this Agreement are based on the expectation that all of the services described in this Agreement will be provided. In the event Client later elects to reduce Consultant's scope of services, Client hereby agrees to release, hold harmless, defend, and indemnify Consultant from any and all claims, damages, losses, or costs associated with or arising out of such reduction in services.

(Based on California ACEC Standard Form Agreement)



### Assumptions

Consultant's Scope as set forth below is based on the following mutual assumptions:

\*

\*

In the event any of these or other project assumptions change or are inaccurate, Consultant's Scope, Schedule, and Compensation shall be adjusted accordingly.



### The Approval Waterfall

Client shall review and approve Consultant's services at the milestones identified below. In the event, of a subsequent change or modification of such approval impacting Consultant's services, Consultant's Scope, Schedule, and Compensation shall be adjusted accordingly.



# Preserve the Project Substitutions & Changes

Consultant's review of submittals, substitutions, and proposed changes and modifications shall be solely for the purpose of confirming that the submitted information is in general conformance with the design and the project objectives and shall not be responsible for variations proposed or implemented by Contractor. Contractor shall remain exclusively responsible for satisfaction of all project objectives, codes, and criteria.



### Change Markers Routine Issues

**Unforeseen Site Conditions** 

Contractor performance

Weather

**Codes & Regulations** 



# Change Markers Critical Categories

Client

Contract

Scope/Program

Change in Prime or Manager Level Players

\$\$\$\$\$\$\$\$\$\$\$\$\$\$



### Models to Monitor Projects

- Metric Based
  - Earned value analysis
  - Schedule
  - Payments
- Event Based
  - Scope
  - Staff & Representation
  - Communication



### Metric Models to Monitor Projects

- Fees Earned
- Fees Received
- Schedule (you and others)
- Budget (you and others)
- Change Orders (and requests)
- Requests for Information
- Client & Third Party Claims



### Event Based Triggers to Monitor Projects

- Schedule & Budget Busts
- Material staff/leadership changes by any party
- Failure to follow agreed upon procedures
- Communication breakdowns
- Missing milestones or other commitments
- Claims & Backcharges



### The Change Measure

# The Project Plan

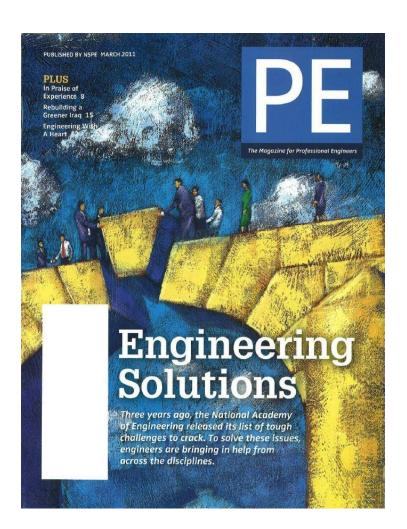


### So "it" is happening – now what?

- IROPE
- Engage Internal & External Resources
- DOCUMENT the event and action!
- Continued Follow Up & Assessment
  - With the Internal & External Resources
  - 10/30/90 Days
  - Adjust As Necessary



#### Sixteen Clauses You Need to Know



IN FOCUS CONTRACTS

### 16 Contract Provisions You Need to Know

Make sure you understand these basic contract terms before venturing into your next project.

In the AEC community, contractual agreements provide the structure and road map for successful, profitable projects. It is amazing, however, that project participants are often unaware of the actual contract terms.

Only by familiarity with, and frequent reference to, the actual contractual obligations can team members deliver the required contract services without voluntarily providing more or inadvertently providing less.

While each contract should be created based on the unique demands of each project, there are some key contractual issues that apply to virtually any engineering service agreement. Every engineer should be familiar with them.

1

#### SCOPE OF WORK.

This is the most important provision of any services agreement. More than any other provision, the scope of work statement defines the parties' expectations and establishes the parameters of the services to be provided. Accordingly, the scope of work should be as compiete and detailed as possible. Ambiguity and open-ended descriptions should be avoided wherever possible.

possinize. To preserve the benefits of a properly drafted soope of work statement, the agreement should also state than no additional services will be provided absent a written amendment to the agreement signed by both parties. Such a provision avoids claims that additional services were promised but not delivered. However, such a provision requires diligence on the part of the engineer to make certain that any additional services are documented by a written amendment, the engineer may face claims that it is not entitled to payment for the services, regardless of Whether they were actually

#### CHANGE IN/ ADDITIONAL SERVICES.

A necessary corollary to defining the scope of services is defining when, how, and why the scope of services will change. In this regard, it is very important to provide as detailed a list as possible of those services that are not included in the basic agreement, as well as those services that will be treated as "additional." Such lists should be preceded by the words "including, but not limited to" as a means of making the list nonexclusive. Such changes are usually required to be in writing. The problem arises, however, when the project timing or owner delay does not allow for this process. Accordingly, additional services provisions should include a self-executing mechanism to avoid unnecessary delay. For example, the owner or prime consultant may be given a certain time period in which to object to additional services proposed by the engineer, if the owner does not respond, the owner will be deemed to have agreed to

OWNER RIGHTS

RESPONSIBILITIES Generally, an engineering service agree ment focuses on the obligations of the engineer. Often, the only obligation of the owner or prime consultant defined in the Depending on the nature of the project, however, other rights and responsibilities of the owner or prime consultant should be identified. For example, what information is the owner or prime consultant expected to provide and what right does the engineer have to rely on that information? Similarly what is the extent of the owner's project input and authority, and when is that input to be provided? Consideration of these issues can be invaluable in clarifying the expectations of the parties and can greatly assist the engineer in providing a quality, cost-effective service

#### **IROPE**

- Issue
- Risks
- Options
- Plan
- Execute



### An IROPE Matrix

Clause	Open- Ended	Third- Party Issues	External Factors	Risk Exceeds Reward	Other	Response
Scope of Work						
Other						

#### IROPE Issue

- Client & Project Selection
- Sixteen Contract Clauses (and others)
- Four-plus Elements of Evaluation
  - Open-ended obligations
  - Third-party reliance
  - Outside factors
  - Risk vs. Reward



### IROPE Risks

- Identify the Risks:
  - Internal
  - External
    - Client
    - Contractors
    - "Project"
    - Others
- Weigh the Risks for:
  - Probability
  - Severity



### IROPE Options

- List options applicable to risks.
- Coordinate and combine where possible.



#### IROPE Plan

- Develop a strategic and proactive plan from the options.
- Focus first and foremost on risks with the greatest combined probability and severity.
- Identify the specific steps, tools, and procedures to implement the plan.
- Monitor the issues and risks over time on a regular schedule.



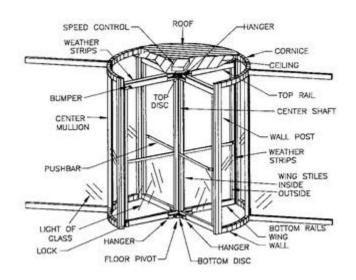
#### IROPE Execute

Although it seems so simple, a partially completed or ignored project delivery plan is the greatest risk of all.

Adjust the plan as necessary as the project proceeds.



### The Client Change



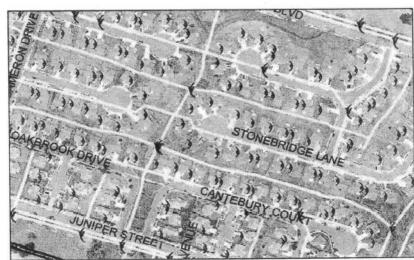


### The Setting

- Design-Build Renovation of 700+ units of residential construction on military base constructed over 30+ year time period
- Seven prior similar projects with same Design-Builder and Architect
- Design-Builder went to fixed price \$50M contract with military based on 15% design documents
- At same time, Design-Builder went to fixed price contract with it contractor subsidiary







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	-	RENO HOUSING PROJECT UNIT				NO OF
		TYPE	PHASES	MAKE-UP	QTY. OF BLDGS.	BEDROOMS
		1	PHASE-3	IA	51	2 TO 2 MOD.
	1/1	2	PHASE-3	IB	30	2 TO 2 MOD.
	/X	3	PHASE-2	IC	89	2 TO 2 MOD.
		4	PHASE-2	ID	83	2 TO 2 MOD.
		5	PHASE-3	IB	31	2 TO 3
1		6	PHASE-I	2A	32	3
		7	PHASE-I	2B	35	3
	1	8	PHASE-2	2C/BI	102	3
	123	9	PHASE-I	2CH	5	3
Q	17/	10	PHASE-I	2D/B2	33	3
JNCO	100	11	PHASE-3	5A	8	3
	XX	12	PHASE-I	5B	8	3
		13	PHASE-I	5C	10	3
		14	PHASE-3	2D/B2	75	3 TO 4
		15	PHASE-3	3A	9	4
		16	PHASE-I	3B	10	4
		17	PHASE-3	3C/CI	21	4
11		18	PHASE-I	3D/C2	15	4
1,		19	PHASE-I	6A	3	4
		20	PHASE-I	6B	I	4
SACO S		21	PHASE-3	5A	19	3
	$\Diamond \Diamond$	22	PHASE-3	5B	5	3
	1/	23	PHASE-I	50	11	3
		24	PHASE-3	5B	13	3 TO 4
		25	PHASE-I	6A	2	4
		26	PHASE-I	6B	2	4

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## § 2.8.3 The Architect shall furnish or provide the following services only if specifically designated:

Services		Responsibility (Architect, Owner or Not Provided)	Location of Service Description	
.1	Programming	Owner		
.2	Land Survey Services	Owner		
.3	Geotechnical Services			
.4	Space Schematics/Flow Diagrams	Architect		
.5	Existing Facilities Surveys	Owner		
.6	Economic Feasibility Studies	Not Provided		

The Architect shall be entitled to rely on the accuracy and completeness of services and information furnished by the Owner. The Architect shall provide prompt written notice to the Owner if the Architect becomes aware of any errors, omissions or inconsistencies in such services or information. The Architect represents and warrants that it has reviewed the Project parameters and other information identified in Article 1.1 and the Project site-and, to the best of the Architect's knowledge and professional judgment, has satisfied itself that such information and-site is sufficient for the performance of the Architect's Services under this Agreement.



Without limiting the foregoing, the Architect shall have sole and exclusive responsibility for the design and engineering of the Project, and the Architect shall prepare and provide the various drawings, specifications and other design documents (which shall include utilities systems and landscaping) necessary or appropriate for the completion of the Project, including those documents described in summary in **Exhibit F** attached hereto (each a "Deliverable Document"). All drawings, specifications and other design documents shall comply with the Project parameters and applicable laws and requirements identified in this Agreement and shall provide for the design of the Project to a standard of quality and integrity that is equal to or better than such Project parameters and requirements. Without limiting the foregoing, all drawings, specifications and other design documents must satisfy all "Design Criteria" defined in **Exhibit E** attached hereto.



## The Claim

- Design-Builder sold out to larger international company six weeks before CDs complete
- Architect de facto did all review of existing site plans and site reconnaissance
- Architect received undifferentiated directions simultaneously from new Design-Builder and its contractor subsidiary. Design-Builder later disclaimed validity of contractor directions/commitments.
- Claim for \$1.1M for 100% of all change orders from site conditions or variations
  - Changes from 15% documents
  - Differing Site Conditions
  - Client rejected "value engineering"



# The Client Strategies & Solutions

- A contract consistent with appropriate project delivery strategies and principles and not "faith and trust"
- No assignment
- Understand and establish organizational structures and project responsibilities of participants



## Critical Issues & Actions

- Risk & Advice Documentation
  - Variation from Plan & Expectations
- Client Change
  - Communicate & Document Status and Plan
- Scope Discipline
  - Lack of Contract Recognition



## The Contract

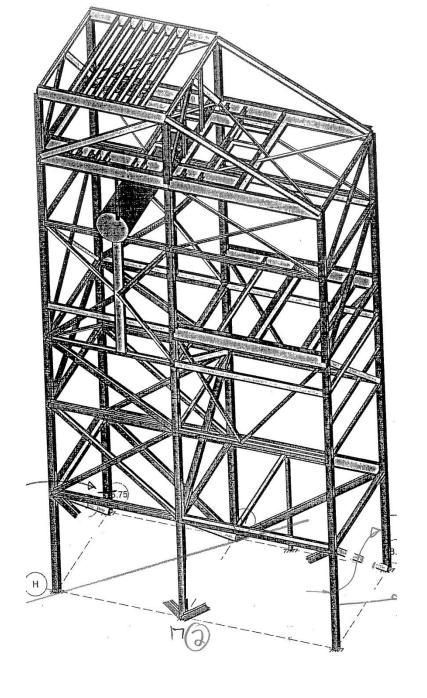




# The Setting

- Engineer as Consultant to Contractor (but that isn't the point or relevant)
- 6+ year relationship over multiple projects
- Steel Frame Structure over 150 feet tall
- Periodic, non-documented, limited engineer contact with owner
- Site presence on a non-specific "as requested" basis.





## The Punch Line

- Total Project Collapse
- One Death
- Two Injured Workers
- Combined Claims Exceeding \$10M



# The Perfect Storm Played Out

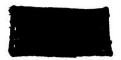
- Contractual Ambiguity
- The Independent/Defiant/Persuasive Contractor
- The Chaos of the Jobsite





Proposal #02-03

January 29, 2002



Attention: Mr.

Reference:

River Bridge

Subject:

Proposal to Provide Miscellaneous Consulting Engineering Services

Related to

Dear Sir:

Per your request, Consulting Engineers, Inc. is pleased to present with this proposal to provide consulting engineering services related to

Our proposed scope of services will be defined for each project as needed. The first project will be a pre-bid design for the River Bridge, as discussed today.

For the purposes of this agreement, labor will be billed at the following rates:



\$160/hour

\$125/hour

\$ 70/hour

Drafter

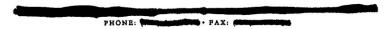
\$ 60/hour

These rates will remain in effect through December 31, 2002, after which time they will be subject to increase. Project expenses will be billed at cost with no mark-up.

#### Terms and Conditions

A copy of our standard terms and conditions (2 pages) is included as an attachment to this proposal. Please notify us immediately if you do not receive these pages so that we may send them to you. This proposal is invalid without this attachment.

Documents produced under this agreement are for the sole use of Iconco, are not intended for use by other parties, and may not contain sufficient information for purposes of other parties or other uses. Our professional services are performed using that degree of care and





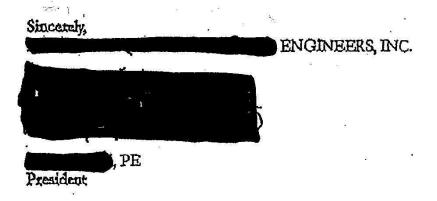
January 29, 2002

Per your request, Consulting Engineers, Inc. (1997) is pleased to present with this proposal to provide consulting engineering services related to

Our proposed scope of services will be defined for each project as needed. The first project will be a pre-bid design for the services will be River Bridge, as discussed today.

For the purposes of this agreement, labor will be billed at the following rates:





Attachment Terms and Conditions (2 pages)

	APPROVED FOR			
Ву:				
Title:	Vr			
Date:	1-29-02			

#### CONSULTING ENGINEERS, INC. TERMS AND CONDITIONS FOR PROFESSIONAL SERVICES

This Terms and Conditions for Professional Services (the "Agreement") is an attachment to a letter-proposal (the "Proposal") between and Client. Client has authorized commencement of work by signing the "Approved" section of the Proposal. The Agreement is hereby incorporated and made a part of the contract between the perties. In consideration of the mutual agreements set forth herein and intending to be legally bound, the parties hereto agree as to the following:

#### 1. INVOICING AND PAYMENT

Client shall pay compensation as outlined in the Proposal or at the rates determined in the Professional Services" attached hereto and according to the payment terms below. Invoices may be prepared and submitted by higher on a monthly basis or when the work is completed, at the payment is the upon receipt and is part due thirty (30) days from date of invoice. A service charge of 1.5% per month, or the maximum amount allowed by law, will be charged on past due accounts. Payments by Client will thereafter be applied first to accrued interest and then to the principal unpaid balance. Any attempt fees, court costs, or other costs incurred in collection of delinquent accounts shall be paid by the Client. If payment of invoices is not current, and may suspend performing further work at no liability to

#### 2. RELATIONSHIP BETWEEN CLIENT AND BLCE

It is retained by the Client to investigate and to consult with the Client regarding the Project, as defined in the Proposal. Client shall provide the performance under this Agreement. Such a services are for the benefit of the Client, but Client recognizes that the extent of those services is limited by the time-frame chosen and the funds expanded by the Client for the investigation.

The proposal completeness, adequacy, or quality of said independent consultants' work, or specialty work.

#### 3. INFORMATION PROVIDED BY CLIENT

and the Client shall discuss and agree upon the information needed for rendering of services thereunder. The Client agrees to provide to be needed, which respect to such information, the Client understands and agrees that we will rely solely upon the Client to custor the accuracy and completeness thereof, as the Client recognizes that it is impossible for the contract of the accuracy, completeness and sufficiency of such information.

#### 4. OWNERSHIP OF DOCUMENTS, PROPRIETARY INFORMATION, INDEMNIFICATION

This proposal end all documents, including, but not limited to, drawings, specifications, computer disks, reports, calculations, and estimates, prepared by the in connection with this Agreement ("The Confidential Information"), are instruments of service and are intended for the sole use of the recipient hereof, and may not, succept as otherwise described herein, be disclosed, discribited or disseminated in any form without the prior written consent of the Confidential Information is and shall remain the sole property of states.

Client may distribute documents generated by the incommention with the services under this Agreement to third parties subject to the indemnification provision set forth above, and provided that said third party agrees in writing to be bound by the confidentiality and ownership of documents provisions of this Agreement.

The terms of this Section shall survive termination of this Agreement.

#### 5. STANDARD OF CARB

represents that its services shall be performed, within the limits prescribed by Client, in a manner consistent with that level of sens and skill ordinarily execused by other professional consultants under similar circumstances at the time the services are performed. No other representation, express or implied, and no warranty or guarantee are included or intended in this Agreement, or in any report, opinion, document, or otherwise.

#### 6. LIMITATION OF LIABILITY

The liability of countries its employees & subconsultants, including but not limited to liability for Client's claims of contributions and indemnification related to third party claims arising out of services reported by the countries of the party claims arising out of services reported by the countries of the properties or work performed arising out of or in connection with this Agreement and for any total be limited to the greater of (i) ten thousand dollars (\$10,000) or (ii) payment received by the form Client for the particular service provided giving rise to the claim. The limitation of liability set forth herein is for the particular service of the countries have liability arising out of or in connection with this Agreement, whether the claim arises in contract, tort, statute or otherwise.



#### 5. STANDARD OF CARE

represents that its services shall be performed, within the limits prescribed by Client, in a manner consistent with that level of care and skill ordinarily exercised by other professional consultants under similar circumstances at the time the services are performed. No other representation, express or implied, and no warranty or guarantee are included or intended in this Agreement, or in any report, opinion, document, or otherwise.

#### 6. LIMITATION OF LIABILITY

The liability of the its employees & subconsultants, including but not limited to liability for Client's claims of contributions and indenmification related to third party claims arising out of services rendered by the party claims arising out of or in connection with this Agreement and for any other claim shall be limited to the greater of (i) ten thousand dollars (\$10,000) or (ii) payment received by from Client for the particular service provided giving rise to the claim. The limitation of liability set forth herein is for any and all matters for which the otherwise have liability arising out of or in connection with this Agreement, whether the claim prices in contract, tort, statute or otherwise.



#### 7. ASSIGNMENT

Neither this Agreement nor the benefits or obligations under this Agreement shall be sold, assigned or transferred by either party to say third parties including subsidiary or affiliated comparies without the prior written approval of the other party, with such approval not to be unreasonably withheld by either. In the event the approval is given by either for assignment or transfer, such an approval shall not relieve either from any liability and/or responsibility under the Agreement.

#### 8. TERMINATION/CANCELLATION

Client and **Client** will have the right to terminate this Agreement for their convenience by giving ten (10) days prior written notice.

After termination, **Client** will be reimbursed for services rendered and necessary expenses incirred to the termination date upon submission to Client of detailed supporting invoices. The obligations of paragraphs 3, 4, and 6 remain in effect after termination.

#### 9. NOTICES

All notices to writing to be given hereunder by either party to the other party shall be served by registered air mail letter or sent by telegram, telex, cable or facebride.

#### 10. DISPUTES

and Client recognize that disputes string under this Agreement are best resolved at the working level by the parties directly involved. Both parties are encouraged to be integrative in designing mechanism and procedures to resolve disputes at this level. Such efforts shall include the referral of any remaining issues to dispute to higher authority within each participating party's organization for resolution. Palling resolution of conflicts at the organizational level, when and Client agree that any remaining conditions arising out of or relating to this Agreement shall be submitted to non-binding mediation unless make and Client mutually agree otherwise. If the dispute is not resolved through non-binding mediation, then the parties may take other appropriate sotion subject to the other terms of this Agreement.

#### 11. GOVERNING LAW

The validity, performance, and construction of this Agreement, and the relationship between Client and Summer shall be governed and interpreted in accordance with the substantive laws of California, United States of America, without regard to its choice of law rules. This Agreement shall be construed as to its fair meaning and not strictly for or against either party.

#### 12. JOBSITE SAFETY

Neither the professional activities of their obligations, duties and responsibilities including, but not limited to, construction site, shall relieve the contractor and any other entity of their obligations, duties and responsibilities including, but not limited to, construction means, methods, sequence, techniques or procedures necessary for performing, superintending or coordinating all portions of the Work of construction in accordance with the contract documents and any bealth or safety procurious required by any regulatory agencies.

The client agrees that the general contractor or other entity or their employees in connection with their work or my health or safety precurions. The Client agrees that the general contractor and its various subcontractors are solely responsible for jobeite safety, and warrants that this interes shall be made evident where appropriate in the Client's agreements with other contractors. If the Client is a Contractor or Sub-contractor on the Project, the Client also agrees that the Client, common and additional insureds under the client's general hisbility insurance policy; in other cases the Client agrees to arrange for this indemnification and additional insureds under the General Contractor's general liability insurance policy.

#### 13. MISCELLANEOUS

In the event of any hidgation or proceeding involving and Client, the prevailing party shall be entitled to recover its reasonable legal fees, expert flees, and normal employee rates and associated costs from the non-prevailing party.

Failure by Client to object to say of the terms and conditions contained in this Agreement before the commencement of services by

Notwithstanding anything so the contrary in this Agreement, seemed Client agree that neither party shall not be liable for any special, indirect, consequential, lost profits, or punitive demanges.

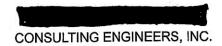
If any tarm, condition, or provision of this Agreement is found menforceable by a count of law or equity, this Agreement shall be construed as though that term, condition, or provision did not exist, and its unemforceability shall have no effect whatsoever on the rest of this Agreement.



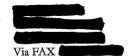
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Neither the professional activities of their obligations, duties and responsibilities including, but not limited to, construction means, methods, sequence, techniques or procedures necessary for performing, superintending or coordinating all portions of the Work of construction in accordance with the contract documents and any health or safety precautions required by any regulatory agencies. The and its personnel have no authority to exercise any control over any construction contractor or other entity or their employees in connection with their work or any health or safety precautions. The Client agrees that the general contractor and its various subcontractors are solely responsible for jobeits safety, and warrants that this intent shall be made evident where appropriate in the Client's agreements with other contractors. If the Client is a Contractor or Sub-contractor on the Project, the Client also agrees that the Client, which, and formula consultants shall be indemnified and shall be made additional insurads under the client's general liability insurance policy; in other cases the Client agrees to arrange for this indemnification and additional insurade insureds under the General Contractor's general liability insurance policy





August 17, 2005



Attention: Subject:

Mr.

Contract for Year 2005 Projects

Dear Sir:

Work for projects this year will be in accordance with our contract for the River Bridge with cover letter dated January 29, 2002, except that labor will be billed at the following rates:

\$165/hour

\$140/hour \$75/hour

Staff Engineer Drafter

\$ 65/hour

The above rate for me is the same as before.

Please let me know if the above is not acceptable.

Thank you.

Sincerely,

CONSULTING ENGINEERS, INC.

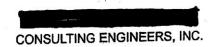
President F



### August 17, 2005

Work for projects this year will be in accordance with our contract for the River Bridge with cover letter dated January 29, 2002, except that labor will be billed at the following rates:





July 5, 2006



Attention: Subject: Point Facility

Dear Sir:

Work for the Point Facility will be in accordance with our contract for the Noyo River Bridge with cover letter dated January 29, 2002, except that labor will be billed at the following rates:

Staff Engineer

Drafter

\$165/hour \$145/hour \$ 85/hour

\$ 75/hour \$ 65/hour

Rates are fixed until December 31, 2006, when they are subject to change. Please let me know if the above is not acceptable.

As Mr. stated of the City/County of stated at the meeting last week, spot site visits by our personnel will be required, with periodic daily reports needed. We intend to use the county of these spot visits, probably in afternoons.

CONSULTING ENGINEERS, INC.

PE
President

PHONE: FAX:

July 5, 2006

Work for the Point Facility will be in accordance with our contract for the Noyo River Bridge with cover letter dated January 29, 2002, except that labor will be billed at the following rates:



Market Market			R	ECEIVE	D
	PURCHASE	ORDER/SU	CONTRACT		8721
		10.0	3	IMPORTANT: In Triplicale as of the	involces must be submitted letailed in Article 4 on the is order and must refer to the the upper right hand corner.
i.		Perform Work at or Ship to:	Various 1	DATE <u>Sept</u> Projects	ember 16, 2005
Performance Bon	% Id and Payment Bond Voice Due of each month		Job/Phase No. Activity Code Vendor No.	Various Pro	jects
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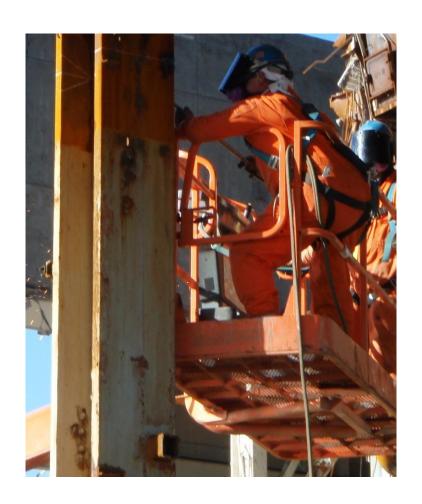
Severson &Werson  "Subcontractor shall hold harmless, indemnity and defend Contractor, its directors, officers, employees and agents from and against any and all claims, damages, liabilities, losses and expenses, including reasonable attorneys' fees, attributable to bodily injury, sickness, disease or death of any person, whomsoever, including Contractor's and Subcontractor's employees or property damage to any persons or organizations whatsoever, arising out of or occasioned by or in any way connected with the performance of the work called for by this Purchase Order/Subcontract. Nothing in the foregoing is intended as an agreement to hold harmless, indemnify of defend Contractor, its directors, officers, employees and agents from such person's own willful conduct".



# **Project Sequence**

- Thursday notification to proceed with topple structure using methodology proposed by contractor – no engineer experience with method
- Friday site visit and revelation that contractor has already removed more support than intended by engineer – no objection stated
- Monday morning topple





# Side Note: Jobsite Photography

- Photos should be taken with a specific and strategic purpose
- Generally, photos should be taken from 3 feet or 300 feet
  - Focused on specific observation
  - Overall project status
- Link photos to reports
- Discard the remainder



# On Site Chaos Total Elapsed Time: 27 minutes

- Contractor directs accelerated activities on multiple fronts.
- Contractor Superintendent speaks with engineer, but states, "You worry too much."
- Engineer notes apparent shift in structure and tells superintendent who responds that "it's been like that."
- Superintendent walks away. Engineer is looking again as work continues.
- Collapse.



## The Contract Chaos Outcome

- Initially, financial responsibility acknowledged by contractor and its insurance carrier
- Then, "purchase order" uncovered in accounting
- Contractor/Carrier withdrew commitment
- Two years of litigation and \$2M loss



# Contract Lessons & Strategies

- Signed agreements for <u>all</u> projects
- Recognize the danger (and opportunity) of conflicting contract terms
- Single contract per project
- Procedures & authority for contract execution
- Contract updates and confirmations
- Contain "as needed" & "as requested" services



## Job Site Safety

Disclaim responsibility in contract

Assign responsibility in contract – "sole" or "exclusive"

Act and correspond consistent with contract

Insurance and Indemnity

If people are in danger, be forceful.



## Responding to Observed Conditions

- Notify responsible party of concern
- NEVER recommend a solution
- Clarify that it is outside scope
- Confirm in writing



## **Equip Your Team for Documentation**

As you know, jobsite safety, means, methods, and sequences are not our responsibility as these issues are the contractor's sole responsibility. Nevertheless, when we were on the project site on , 2012, we noted which may be a safety issue. We of our observation and informed suggested that he/she look into it. As it is outside of our scope, we did not suggest a solution. If you have any questions as to our observations, please contact us.



# Keys to Avoid the Storm

Appropriate *Written* Contracts.

Avoid Scope Creep.

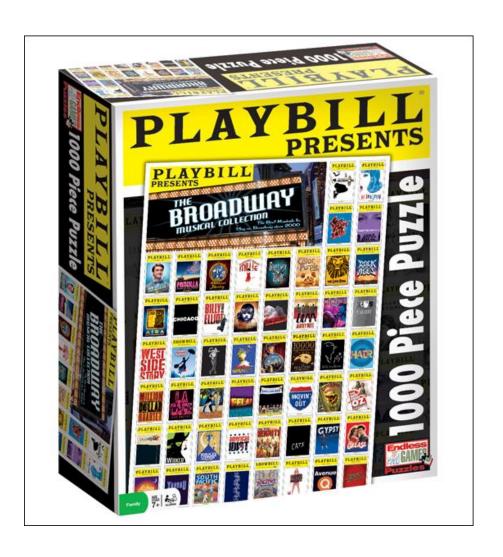
Clear/Consistent/Documented Contractor Communications

Don't Abdicate Design Role

Clearly Establish and Follow Site Safety Role



# The Scope/Program



### **Moving Target**

- National architectural practice with multiple practice focuses and track record of success
- One focal point in practice: higher education
- Multiple projects, millions in construction, multiple awards
- No established procedures, but knew instinctively how to succeed here and especially based on strong, institutional client relationships



### **Moving Target**

- Architect identifies opportunity to pursue community college project in inner-city location.
- Assumes since it is "higher education", the same instinctive principles will succeed
- Two part project a building and a parking structure.
- Will lead on building, but will essentially sub out all design on parking structure



## **Moving Target**

#### Realities

- Community college projects subject to same State oversight as K12 projects and architect has no experience in process.
- Proposed project surrounds a "parcel" leased by college for 20 years to private entity.
- Private entity simultaneously developing private parcel
- Two independent "managers" "oversee" project for college with undefined roles.









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# "Change" Happened

Event No. 1: Building Eliminated, but A/E remained as prime for the reduced contract.

Event No. 2: Private project changed and expanded is size, scope, and plan without coordination with A/E's project.

Event No. 3: Contractor disagreed with Building Officials as to design requirements for design build elements and refused to relent. Since the project was being delayed, the A/E stepped into complete the design/build design.



#### The Claim

- State oversight delays project three years midproject
- College pays contractor over \$6M for changes, delays, and price escalation.
- Architect cannot explain actions at critical moments of "change".
- Core response & defense: "No good deed goes unpunished."
- Claim: \$7.2M+



#### Issues:

- Role, responsibility, & reliability of third party "managers".
- Interplay of "in fill" private parcel.
- K12-like oversight impacts.
- Dependence on subconsultants.



#### Risks:

- Uncertainty of owner's manager's responsibility and authority.
- Potential impacts from simultaneous private development.
- Control standards, necessity of external approval, schedule impacts.
- Cost impacts from potential liability and claims.



#### Issues:

- Role, responsibility, & reliability of third party "managers".
- Interplay of "in fill" private parcel.
- K12-like oversight impacts.
- Dependence on subconsultants.



#### Options/Plan/Execute:

- Define overall project responsibility & right to rely. Limit duties to manager.
- Limit scope of work to the building footprint and exclude rest of site.
- Note process and lack of control over decisions & schedule.
- Validate subconsutlants for quality and viability and support same with contracts for scope of work, indemnity, and insurance.



#### Summary

- Evaluate the Plan and Project
- Coordinated Contracts Consistent with the Plan
- Monitor, Evaluate, and Act Strategically & Consistently
- Communicate & Document Critical Transitions
- Continued Vigilance and Follow Up



#### **Questions & Answers**

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