

# UNDERSTANDING CONSTRUCTION CONTRACT DOCUMENTS

BID  
DOCUMENTS

CONTRACT  
FORMS

CONTRACT  
CONDITIONS

GENERAL  
REQUIREMENTS



TECHNICAL  
SPECIFICATIONS

DRAWINGS

ADDENDUM

CONTRACT  
MODIFICATIONS

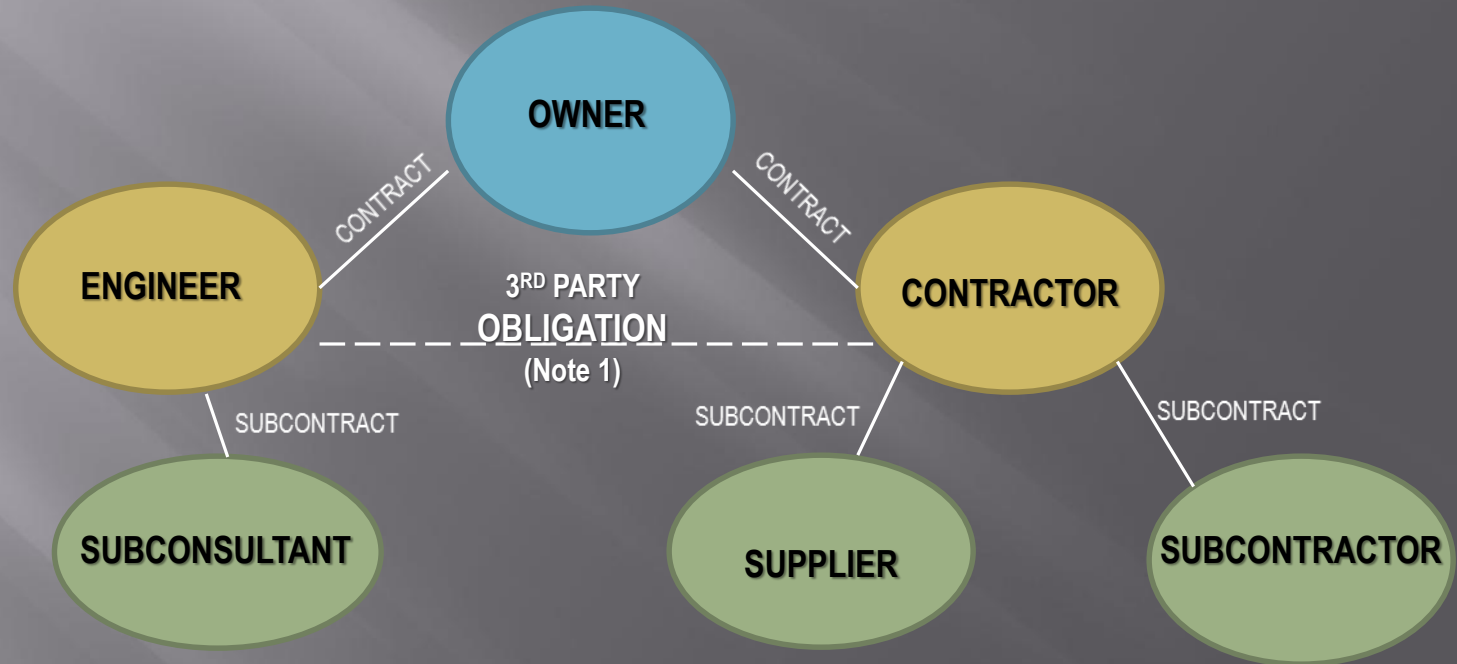
{Risk Management Strategies}

# Construction Contract Documents

- **Construction Contract Documents**: The assembly of legal documents defining obligations, requirements, responsibilities, limitations, product and service commitments, cost, schedule, and administrative procedures associated with the execution of a constructed project.
  - **Contract Forms**
  - **Contract Conditions**
  - **General Requirements**
  - **Technical Specifications**
  - **Drawings**
  - **Addendum**
  - **Contract Modifications**

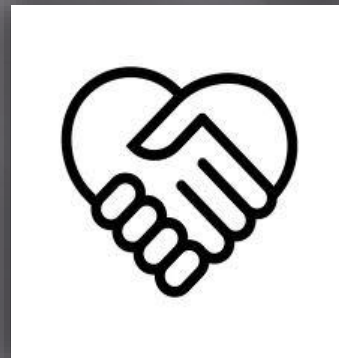


# Traditional Project Delivery Method Design - Bid - Build (Tri-Party Relationship)



Note (1): Texas - No Implied Obligation, No Implied Warranty

# When it Works



# When it Doesn't



# What Goes Wrong?



- Problematic projects usually begin off track, often with multiple planning, management and execution failures.
  - **OWNERS** can fail to adequately define needs, may not support open communications, may be unreasonable and confrontational – particularly with Change Conditions
  - **ENGINEERS** may fail to meet service commitments, fail to act impartially, misunderstand Standard-of-Care requirements, exercise poor quality control
  - **CONTRACTORS** may mismanage schedule/subs, fail to meet General Requirement (CA) obligations, don't provide qualified project management/superintendence

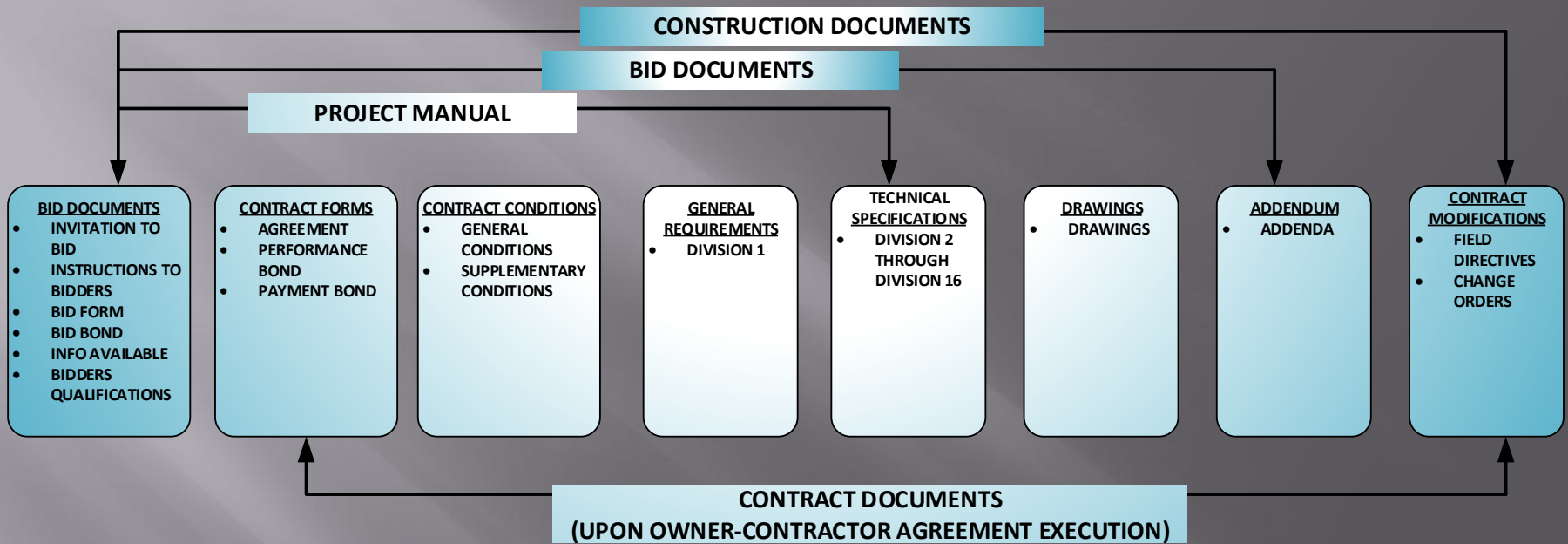
# Conflicts Are Often Avoidable, Risks Are Often Manageable

- Common mistakes are usually made by *ALL* parties – plenty of blame to share.



- **OWNERS** (Don't enforce contracts, Inadequate CA/RE, Non-responsiveness, False 'bond' security, Low bid reliance)
  - **ENGINEERS** (Poor QA/QC, 'Cut & Paste' designs, Non-impartial interpreter, Unreasonable scope assignment, Standard-of-Care misunderstanding)
  - **CONTRACTORS** (Poor CA, Subs mismanagement, Unqualified PM/superintendents, Poor schedule control)
- Proper understanding and use of the Contract Documents can best help avoid and manage inherent risks during construction

# Relationship of Construction Contract Documents



This review based on standard industry Format Documents (EJCDC, CSI). Municipal, Agency owners often use modified documents

# Bid Documents



- **Invitation to Bid**: General project description, requirements and solicitation
- **Instruction to Bidders**: Detailed description of required Bid Package submittals
- **Bid Form**: Project pricing definition (Lump Sum-Unit Price-CPFF; Base Bid-Alternate Work); Bid Hold Time; Bidder's Acknowledgement; Execution Signature
- **Bid Bond**: (Penal Sum Form) Bid guarantee (normally 5%). Personal guarantee or more commonly a Surety bond. Forfeited if selected Bidder defaults on bid
- **Information Available**: Owner-furnished information (Geotech, Environmental, Flood Study, etc.) provided for Bidders' information. *{Should be noted as 'for Contractor's information only – not part of Contract Documents.' in Suppl. Conditions}*
- **Bidder Qualifications**: (Optional) Effective method to help select 'Best-Qualified Low Bidder' vs. low bidder in open procurement bids
- **Other Forms**: (Optional) As may be required by Owner or funding agencies
- **(Note: CoSA / SAWS include Bid Documents in 'Contract Documents' definition)**

# Contract Forms



- **Agreement**: Legally executed contract between Owner and Contractor initiating project construction, including:
  - **Executing Parties Identification and Date**
  - **Summary of Work (\*)**
  - **Third Party(ies) Definition** (i.e. Owner's Agents - Engineer, Laboratory, etc.) (\*)
  - **Contract Time** (Milestones, Substantial Completion, Final Completion)
  - **Liquidated and Special Damages** (LDs best defined as 'Agreed Sum', must be reasonable and non-punitive. SDs must reflect actual economic losses) (\*)
  - **Contract Price** (Should reflect Bid Form) (\*)
  - **Payment Procedures** (Progress Payments, Retainage, Substl./Final Payments, Interest) (\*)
  - **Contractor's Representations** (Contractor's stated acceptance of the Contract Documents) (\*)
  - **Contract Documents Summary** (Summary listing of Contract Documents – Agreement, Bonds, GCs, SCs, General Requirements, Specifications, Drawings, Addenda)
  - **Execution** (Owner-Contractor signatures and date)
  - **(Note: (\*) Defined elsewhere in CoSA, SAWS Contract Documents)**

# Contract Forms

- **Performance Bond**: Third party (Surety) guarantee of Work performance in accordance with the Contract Documents definition
- **Payment Bond**: Third party (Surety) guarantee of subcontractor/supplier payments
- Use standard bond formats (EJCDC, AIA, etc), and review Surety Bond certificates closely against standard format requirements
- Surety should be certified per Circular 570 – US Treasury Dept.
- Be fully aware of surety notification requirements (Right-to-Cure)
- (Note: CoSA, SAWS normally waive bonds for projects <\$25,000, and requires Texas Govt.Code 2253/Texas Insurance Code 3503 compliance in lieu of Circular 570)

# Contract Conditions

- **General Conditions**: Extensive definition of Contract terms, requirements, responsibilities, limitations, authorities, rights, duties and administration.
  - **Definition of Terms**
  - **Prelim.Matter/Submittals**
  - **Use & Control of Documents**
  - **Site Conditions**
  - **Bonds and Insurance**
  - **Contractor's Responsibilities**
  - **Owner's Responsibilities**
  - **Other Work at Site**
  - **Engineer's Status**
  - **Work Changes/Claims**
  - **Work Cost**
  - **Change Orders (Cost/Time)**
  - **Testing/Inspection/Correction**
  - **Payment**
  - **Suspension/Termination of Work**
  - **Dispute Resolution**
- *(Do Not edit or modify GCs. Use Supplementary Conditions for any amendments, modifications, additions or deletions)*

# Contract Conditions

- **Supplementary Conditions**: Modify, amend or delete General Condition provisions.
- Reference specific GC provisions by parallel SC reference (i.e. SC-1.05 for GC-1.05)
- Give clear, concise definition of required edits, additions or deletions
- Should be used sparingly and reviewed by legal counsel



# General Requirements (Division 1)

➤ **General Requirements**: Expansion of the Contract Conditions, Contract Forms and Specifications for specific project needs<sup>(1)</sup>. Typically include:

- **Work Summary/Sequence**
- **Schedule of Values (2)**
- **Environmental Protections**
- **General Coordination**
- **Construction Management**
- **Submittals (3)**
- **Temporary Facilities**
- **Measurement and Payment**
- **Worker Safety**
- **Meetings**
- **Quality Requirements**
- **Work Execution Requirements**

(1) **Caution**: Be aware of General Requirements implied costs - could exceed 10%.

Don't use them if you don't need them

(2) **Schedule of Values**: A detailed pricing breakdown (by Spec section or comparable definition) prepared by Contractor before Work begins. Supports progress payments, and assists with potential Change Order pricing – particularly for Lump Sum work

(3) **Submittals**: Should be approved prior to related Work payments. Best to use detailed Submittals Log, checked with each payment application. Frequent source of conflict.

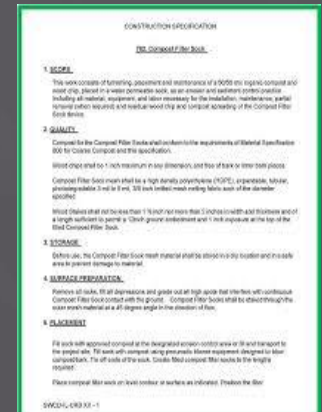
**(Note: CoSA, SAWS don't use separate General Rqmnts, instead embedded in GCs & Forms)**

# General Requirements (Typical Submittal Log)

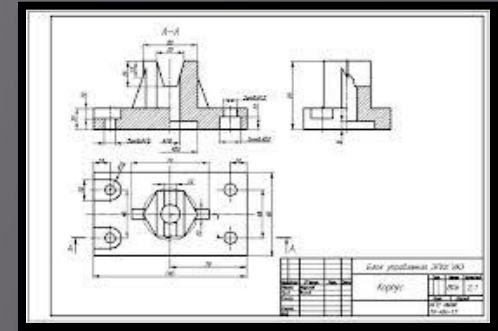
Main Street – PWS Well No.7 Project Required Submittals Summary		
Section	Title	Required Submittal Timing
00700-2.01.B	Insurance Certificates	Before Work begins
00700-5.01	Performance/Payment Bonds	Before Work begins
00700-2.05	Prelim. Progress/Submittals/Value Schedules	Within 10 days of Execution
00700-10.05	Claims (Contract Price or Time)	Within 30 days of event
00800-6.06.B	Subcontractors (>5% of the Work)	Within 5 days of Bid Opening
01046	Connection to Existing Utilities	At least 5 days prior to scheduled event
01300	Submittals – Schedule of Values	Within 30 days of Execution
01300	Submittals – Shops/Samples/Product Data	Prior to executing related Work
01300	Submittals – Payment Application/Certs.	Monthly (if >\$5,000)
01300	Submittals - RFIs	As reqd, prior to executing related Work
01300	Submittals – Change Order Proposals	Within 30 days of event
01300	Submittals – O&M Manuals (Ref 01730)	Within 90 days of approved Shops
01300	Submittals – Lesson Plans (Ref 01731)	At least 30 days prior to training
01300	Submittals – Record Documents (Ref 01720)	With written Notice of Completion
01300	Submittals – Guarantees, Warranties, Bonds	With written Notice of Completion
01620	Manufacturers’ Installation Certificates	Prior to Substantial Completion
01630	Substitution Requests	Within 30 days of Execution
02830	Chain Link Fences and Gates	Prior to executing related Work
01700	Closeout Documents	Prior to Substantial Completion
01720	Record Documents	Within 14 days of Subst. Completion
01730	Operations and Maintenance Manuals	Prior to Substantial Completion
01731	Lesson Plans	Within 14 days of scheduled training
02830	Chain Link Fence and Gates	Prior to executing related Work
03300	Cast-In-Place Concrete	Prior to executing related Work
03600	Grout	Prior to executing related Work
04100	Mortar	Prior to executing related Work
04150	Masonry Accessories	Prior to executing related Work
04220	Concrete Masonry Units	Prior to executing related Work
05051	Anchor Systems	Prior to executing related Work
05500	Miscellaneous Metal Fabrications	Prior to executing related Work
07920	Caulking and Sealants	Prior to executing related Work
09900	Painting	Prior to executing related Work
10400	Identification Devices	Prior to executing related Work
11100	Electric Motors	Prior to executing related Work
11213	Vertical Turbine Pumps	Prior to executing related Work
11215	Water Well	Prior to executing related Work
11260	Chlorination Equipment	Prior to executing related Work
11260	Chlorination Equipment – Manuf. Cert.	Following Installation
11261	Chlorination System Dry Scrubber	Prior to executing related Work
11261	Cl2 System Dry Scrubber – Manuf. Cert.	Following Installation
11264	Booster Pump System	Prior to executing related Work
11970	First Aid Equipment	Prior to executing related Work
13600	Instrumentation and Control Systems	Prior to executing related Work
13620	Primary Sensors and Field Instruments	Prior to executing related Work
13650	Control Panels and Enclosures	Prior to executing related Work
13700	Radio Telemetry Control System	Prior to executing related Work

# Technical Specifications

- **Technical Specifications**: Detailed narrative definition of technical Work including general, product and execution requirements. Should follow industry standard work division categories (i.e. CSI – 16 (or 33) Divisions, or Agency Divisions).
- Careful with cut-and-paste generic reuse (review for each project, re-edit MasterSpec)
- Avoid duplicate information on Drawings (leads to errors & omissions)
- Be adequately familiar with reference standards (potential conflicts) (use MasterSpec notes)
- Often beneficial to get manufacturers' draft review for specialty products (but be careful of proprietary 'implied sole source' edits – seek multiple input)
- 'Prescriptive' vs. 'Performance' specifications (know the difference, and appropriate use)
- Be Clear, Correct, Complete and Concise (C4)



# Drawings



- **Drawings**: Graphic representation of the Work.
- Careful with cut-and-paste generic details (review for each project)
- Avoid duplicate information in the Specs or elsewhere on the Drawings  
(*'Say it clearly once, and reference to that definition elsewhere'* – common source of errors)
- Avoid Drawings notes that would be better included in the Specifications
- Avoid CADD 'false accuracy' (32.7395 feet') – implied design warranty
- Be careful of annotated scales (distorted with different print sizes), use bar scale
- Use 30/60/90% Standard Drawing Production QC checklists where available

# Addendum

- **Addendum**: Bid phase modifications to the Contract Documents.
- Addenda must address specific additions, deletions or modifications to the Drawings, Specifications or other Contract Documents
- Use standard Addendum Form for assembly and transmittal to bidders
- Use Bid Form to confirm bidders' receipt of addenda
- Incorporate all addenda changes in 'Conformed Set' prior to construction

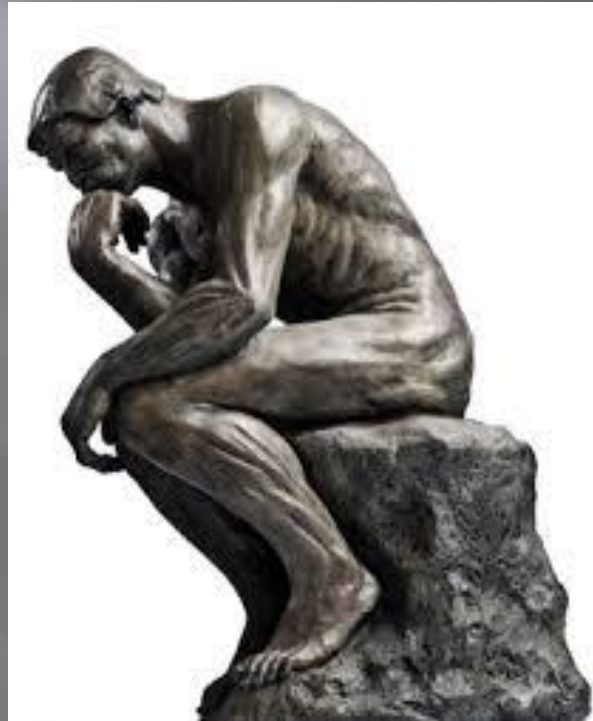


# Contract Modifications

- **Contract Modifications**: Owner- approved changes to the Work during construction.
- Field Directives – Minor adjustments directed by Owner or his authorized agent (i.e. Engineer) not affecting Contract cost or time
- Change Orders – Significant adjustments directed by the Owner affecting Contract cost and/or time
- Change Order process should include standard Request for Change Order (issued by Owner), Change Order Proposal (returned by Contractor), and an executed Change Order (executed by Owner and Contractor)



# Additional Considerations



# Precedence of Documents

- **Precedence**: Order of importance and weight in resolving potential conflicts between various definitions in the Contract Documents.
- Typically discussed in General Conditions. Often defined generally as: Contract Documents supersede referenced standards and codes
- Advisable to provide more detailed precedence through Supplementary Conditions to avoid wide interpretation during subsequent potential disputes (i.e. 'Descending order of precedence includes: Drawings > Technical Specs > General Requirements > General-Supplementary Conditions > Referenced Standards > General Codes) (**Note: CoSA, SAWS define reverse precedence**)
- May be a significant issue during dispute resolution



# Prescriptive vs. Performance

- **Prescriptive Work Requirement**: Detailed definition of Work requirement components, standards and functioning (i.e. ‘Base plate shall be ½-inch ASTM-A53 new billet steel, measuring as shown on the Drawings, with ¼-inch continuous fillet welds, and four 3/8-inch anchor holes centered 1-inch from each corner’ Most appropriate for well defined, time-tested Work components needing exact definition or needing close coordination with other aspects of the project. Most common D-B-B Work definition.
- **Performance Work Requirement**: Definition based on needed functional performance and required standards, with minimal components description (i.e. “Base plate shall be sized and designed to meet AISC Class-B loading conditions, based on the design criteria presented on the Drawings, and shall meet all applicable local, state and federal codes.’) Most appropriate for proprietary systems, or items which can’t be adequately defined during design due to options available to the Contractor. Trench Safety design is a common performance assignment example. Difference is often misunderstood by Engineers/Owners.
- Performance Work requirements typically include Professional Services assignment to the Contractor (i.e. ‘Contractor shall retain a Texas P.E. to.....’). Not the same as final P.E. design of Shop Drawings, etc.
- Engineer cannot transfer core project responsibilities (i.e. Engineer-of-Record items) to the Contractor
- Owners should be aware of Performance assignments by Engineer – you’re paying someone to complete related designs. Be sure any such assignments makes sense for the project needs

# Means and Methods

- **Means and Methods**: The tools, equipment, labor, processes, sequences and procedures used by the Contractor to complete the Work as defined in the Contract Documents.
- Contract Document specifications and drawings should present the required finished product and performance, and avoid defining related Means & Methods as much as possible
- Disputes arising from Work products resulting from Engineer-defined or Owner-defined Means and Methods will support Contractor's claims
- Describe 'what needs to be done' not 'how to do it'



# Bonds

- **Bonds**: Third party guarantee of Bid, Performance, Payment or other defined aspects of the Work, issued by licensed Surety company.
- Surety is liable for up to face value of Bond (usually Contract Amount for Performance/Payment)
- Bonds remain in effect for limited time (typically 1 year after Corrective Period) **(CoSA, SAWS define 24 month Corrective and concurrent Bond periods)**
- Use standard Bond Forms included in Contract Documents (should be based on EJCDC, AIA format), or review Surety-authored bonds closely against standard forms (seek legal counsel if any doubt).
- Require Circular 570 surety certification **(or other as defined)**
- Owner must notify Contractor and Surety promptly of all potential default or termination (Right-to-Cure). Late notification is most common surety release
- Do not expect Surety to issue payments without extensive legal-technical scrutiny

# Insurance

- **Insurance**: Standard policies written to the Contractor, protecting against damages.
- Provides third-party financial assurance for losses and indemnity liability protection
- Should require A.M. Best rating of A+ or better to ensure reliable insurer (see Texas Dept. of Insurance for listings [www.tdi.texas.gov](http://www.tdi.texas.gov))
- Typically define Owner (and Engineer) as 'Also Insured' (additional policy rider cost)
  - 'Also Insured' status includes named party in coverage, separates from coverage limits (i.e. defense costs for insured parties are not part of policy loss limits)
  - Only 'First Insured' will be notified of policy termination or cancellation by Insurance Co. (need to require separate notification of policy changes/termination from Contractor)

# Insurance

- Typical coverages include:
  - Workers Compensation (Statutory) - Protects against on-the-job worker injury/disability claims
  - General Liability – Protects against third-party damage claims (Property/Bodily Injury)
  - Automobile Liability – Protects against auto accident claims
  - Umbrella/Excess Liability – Increases coverage for ‘large claim’ occurrences or multiple ‘Also Insured’ policy dilution
  - Prof. Liability (Perf. Work) – Protects against professional liability claims (Contractor’s P.E.)
  - Builders Risk - Protects against ‘Act-of-God’ damage to the unfinished Work prior to acceptance (normally related to buildings and structures)
  - Pollution Liability – Protects against property damage/fines for release of pollutants
- Define required coverages and policy limits in Supplementary Conditions (CoSA,SAWS define in GCs)
- Require and check Insurance Policy Certificate and Ratings prior to beginning Work. Best to also require copy of policy to confirm actual coverages and limitations.

# Indemnification

- **Indemnification**: Agreement by one contract party (or both) to protect (hold harmless) the other party from third party claims.
- Indemnity should be limited (i.e. 'protect against Contractor's negligent acts..') rather than broad (i.e. 'protect against any and all third party claims...'). Broad indemnity likely not enforceable (in Texas and most states), and may discourage participation (**CoSA, SAWS require broad indemnity coverage, including protection against Owner's negligence**)
- Governmental (and often utility) agencies legally cannot indemnify others
- Beware of contract dispute clauses 'Under the Laws of the State of..' for states allowing broad indemnity (AL, AR, DC, IA, KS, ME, MT, PA, WY, VT)
- Insurance policies typically exclude or limit broad indemnity coverage beyond normal required contractual or 'Also Insured' policy coverages (likely hollow protection beyond these limits)



# Implied Warranty



- **Implied Warranty**: Legal principle related to the Contractor's ability to rely upon sufficiency of the plans and specifications for proper bidding and construction of the Work.
- Most states and the federal government support Implied Warranty contractor claims, allowing Contractor to pursue related claims against Owner
- Texas courts have traditionally rejected Implied Warranty claims, noting Owner as being no more qualified than Contractor to determine and warrant sufficiency of Contract Documents unless explicitly stated as so warranted. (*Lonegan v S.A. Loan&Trust – 1907, et alia*)
- Texas Contractors have traditionally sought relief through Implied Obligation claim

# Implied Obligation



- **Implied Obligation**: Legal principle related to Contractor's ability to seek relief from Engineer based on Negligent Misrepresentation (Errors & Omissions) in the Contract Documents relied upon to bid and construct the Work. Common in most states and federal government.
  
- Recently overturned by Texas Supreme Court, noting Contractor as barred from any recovery because no legal contract exists between Contractor and Engineer, reversing earlier Texas courts positions (*Martin K. Eby v LAN/STV – 2011*).
  
- **Winners and Losers?**
  - Owners – No longer 'shielded' by separate claims against Engineer. Contractors will pursue Negligent Misrepresentation directly against Owner, and Owner will need to attach Engineer to claim. (Loser)
  - Contractors – No longer able to pursue Negligent Misrepresentation claim against Engineer. Will need to pursue fully against Owner, expecting Owner to then pursue against Engineer. (Loser)
  - Engineers – Protected against Contractor claims, but Owners will more likely now pursue Negligent Misrepresentation claim against Engineer for protection. Likely stresses Owner-Engineer relationship, Engineer may be barred from additional Work during dispute resolution. (Loser)
  - Appears to be a Lose-Lose for all parties. Avoid disputes if possible.

# Submittals and Schedule Management

## Submittals:

- Submittals should be completed before related Work payment. Use Submittal Log & Schedule of Values to track status, and to approve (or delay) Payment Applications. Emphasize submittal requirements at Pre-Construction and regular Construction Progress meetings
- Submittals should be administered using standard forms - best defined in Div-1 (Shop Drawing Submittal Form, Sample Submittal Form, Change Order Forms, etc.) Only accept submittals from the Contractor (not subs or suppliers)
- Don't assign submittals review and admin. to junior staff w/o QC review. Common failure

## Schedule:

- All projects should have an Initial Schedule and updated Progress Schedules. Complex project schedules should include Critical-Path definition with float and recovery definitions
- Most disputes include Additional Time claim, often being the largest claimed cost. Proactive schedule management, including schedule recovery best avoids these claims. Schedule mismanagement (by all parties) is a most common project failure

# 'Or Equal' and Substitutions

- Prescriptive specifications often include 'or equal' allowance. General Conditions (and SCs, Div-1) should clearly define allowable 'Or equal' and substitution definitions and related request procedures. Recommended definition includes:
  - If several named products are specified, simplest to define all "Or Equal" requests as substitutions (using SC's or Div-1 *Substitutions* Spec to clarify).
  - 'Or Equal' substitution requests must be submitted promptly (i.e. 'within 30 days of award')
  - Burden to demonstrate 'Or Equal' is on Contractor
  - Engineer's decision is final
  - Engineer's related substitution review costs may be charged to Contractor (if so defined)  
**(CoSA, SAWS – no substitution definition, no limit on submittal reviews)**
- Shop Drawing submittals should not be used to request substitutions (unless specified product is not available within reasonable time, or other circumstances beyond Contractor's control require latent substitution). Best to clearly define in Division 1, review associated procedures at Preconstruction Conference, and repeat as needed
- Don't delegate junior staff to make critical 'Or Equal' decisions



# Management of RFIs



- **Request for Information**: A written request from the Contractor to the Owner seeking an interpretation or clarification of certain Contract Document requirements.
- RFIs should be submitted in standard format, logged and tracked, and responded to promptly in writing. Answer must provide needed clarification. RFIs cannot amend the Contract Documents, nor authorize any Change Order adjustment to the Work
- Only the Contractor can submit RFIs. Do not accept from subcontractors or suppliers
- Each RFI should deal with one (1) specific question, and clearly set forth that issue, the Contractor's needed response information, and Contractor's suggested solution where appropriate. RFI process and administration should be clearly defined in GCs, SCs, Div-1 (CoSA, SAWS – No RFI process or administration definition)
- Abuse of RFIs is common tactic to support Contractor claims. RFIs should not be accepted for: Substitutions or submittals; Scope or schedule adjustments; VE proposals; Routine communications; Response to NCRs; Repeated RFI. Beware of 'The RFI Numbers Game' – often used to support subsequent delay claims. Return unacceptable RFIs as 'Not Reviewed' (nor logged) with direction to resubmit appropriately

# Nonconformance

- **Nonconformance**: Failure of the Contractor to meet requirements of the Contract Documents, either in delivery of Products, Services or Schedule obligations.
  - Work progress and performance should be reviewed regularly against Contractor's approved schedule to identify problems as they occur. Detailed recovery schedule and plan should be requested from Contractor to mitigate problems as any concerns arise
  - Nonconformance Report (NCR) should be issued by Engineer to Contractor (copied to Owner) if recovery commitments are not promptly met (usually within 30 days of problem identification) **(CoSA, SAWS – No formal NCR process)**
  - Owner must copy NCR to Surety, ensuring “right-to-cure”. Failure to do so will jeopardize bond coverage
  - Owner must keep Contractor (and Surety) fully informed in writing of all planned corrective actions, and provide every reasonable opportunity to remedy



# Engineer's Responsibilities and Limits

- Engineer is responsible for project design definitions (except for Performance assignments), and responsible for any bid-phase, construction-phase and operations-phase services assigned by the Owner (Owner's Agent), subject to Professional Standard-of-Care obligations
- Engineer cannot obligate Owner for any Contract Change Orders, and cannot direct the Contractor's Work execution (except in the case of eminent danger when all parties must protect worker or public safety)
- Engineer's RPR (Inspector) should only coordinate with Project Engineer, and not direct or administer construction-phase services (i.e. Engineer's Field Rep)  
Use Suppl. Conditions to clearly define authority and limitations if needed beyond Gen. Condition definitions





# Dispute Resolution

- **Disputes**: Disagreements between the Owner and Contractor related to interpretation or execution of the Contract Documents that cannot be resolved by routine project correspondence. Must normally be filed within 30 days of occurrence.
- Dispute Resolution methods need to be fully defined in the GCs and SCs, commonly including: Notice of Claim > Engineer's (**Owner's**) Interpretation > Negotiation > Mediation > Arbitration (optional) > Litigation (**CoSA, SAWS – Only Owner's Interpretation > Negotiation defined. Prevailing party collects claim defense fees**)
- Engineer's Interpretation. Engineer must act as 'Impartial Interpreter' of the Contract Documents, representing neither the Owner's nor the Contractor's interests in the dispute. Failure to do so likely only aggravates subsequent potential claims
- It is in all parties' best interest to settle disputes promptly and fairly. Litigated claims can cost \$KK to \$MM and several years, distract key personnel resources, harm Owner-Contractor reputations, and may result in limited net recovery (after legal and other costs). No one is likely to emerge feeling like a Winner

# Take Aways



- The 'Perfect' project has yet to be planned, designed or constructed. Be willing to reasonably compromise toward success
- Careful understanding, assembly and use of the Contract Documents best protects all parties from disagreement and conflict
- Consistent and fair use of the Contract Documents supports success and best-value pricing (Bidders' prices will reflect your reputation).
- Owners, Engineers and Contractors must accept a reasonable and equitable approach to achieving project goals

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