## SECTION 6

## CONSTRUCTION CLAIMS AND LITIGATION

This Section focuses on construction claims brought by contractors against state transportation agencies. The Section is arranged into four subsections. The first subsection deals with contract claims procedures. The next two subsections discuss the major liability and damage issues that are usually presented in a large construction claim. The last subsection concludes with a discussion of the trial strategies and considerations that may be used in preparing and defending a construction claim in a typical litigation setting.

## A. CLAIM PROCEDURES

## 1. Introduction

In deciding whether a claim brought by a contractor should be settled administratively or litigated, the agency must be able to evaluate the claim. Is it likely that the contractor will be successful if the case is tried? If so, what kind of monetary exposure is the agency facing? What will it cost to defend the case in terms of money and agency resources? Will an adverse result create a bad precedent, or conversely, will an unwarranted settlement just encourage more claims? ${ }^{1}$

To assess these concerns, an agency must have information about the claim. The agency must understand the contractor's theory on entitlement or liability, the provisions in the contract on which the contractor relies, and what the contractor has in the way of documentation supporting its position. The owner must know how much is sought, how that amount was calculated, and the facts that support those calculations.

Claim procedures allow an owner to investigate the claim and document the facts while they are still fresh. Early notice of a potential claim also allows an owner to evaluate the impact that the claim could have on the owner's construction program. This can have real significance to a public agency that is operating under tight budgetary constraints.

Generally, it is also in the contractor's interest to submit a well-documented claim. A poorly documented claim, in all likelihood, will be rejected, leaving litigation or arbitration as the only means available to the contractor for resolving the dispute.

Contract claims that are not settled by the parties must be referred to a neutral third party for resolution. In the case of state transportation agencies, the "final remedy" for resolving claims can vary widely. They can range from litigation to arbitration conducted by the American Arbitration Association. Some states have created boards and commissions to decide claims, subject to some judicial review. Several states use a mix of litigation and arbitration, specifying arbitration as the sole remedy for claims under a specific dollar amount

[^0]and providing for litigation for claims over that amount. The administrative procedures used by the states to review claims, and the final remedies available to the contractor if the claims are not settled, are listed in a Table in Part 3 of this Subsection.

The variations in the methods used by the states as final remedies stem from their policy on sovereign immunity as a bar to contract claims. Many states have judicially recognized that immunity from suit is waived through contracting. Other states have statutorily waived or abolished sovereign immunity for breach of contract claims. The Table in Part 3 of this Subsection contains a summary showing how each state has dealt with sovereign immunity as a defense against parties seeking redress from a state for breach of contract.

## 2. Immunities from Suit

## a. Sovereign Immunity

Sovereign immunity, unless waived, protects a state, its agencies, and officers from lawsuits, ${ }^{2}$ and applies to contract claims against a state. ${ }^{3}$ The doctrine of sovereign immunity is based on the ancient common law maxim that, "the King can do no wrong," and therefore, he cannot be held liable for his acts or omissions. ${ }^{4}$ The modern justification for the doctrine has been characterized as a means of protecting the public purse: "Sovereign immunity protects the public fisc, and therefore, the public welfare by limiting assaults on the public fisc." ${ }^{5}$

Generally, sovereign immunity can be impliedly waived by conduct, or expressly by legislation. ${ }^{6}$ A number of states have judicially recognized that a state waives its immunity from suit for breach of contract by contracting for goods and services. ${ }^{7}$ The rationale supporting this view was explained by the Delaware Supreme Court.

It must be assumed that the General Assembly, in granting the State Highway Department the power to contract intended that it should have the power to enter into only valid contracts. A valid contract is one which has mutuality of obligation and remedy between the

[^1]parties to it (citations omitted). It follows therefore, that in authorizing the State Highway Department to enter into valid contracts the General Assembly has necessarily waived the State's to suit immunity for breach by the State of that contract. ${ }^{8}$

In Wisconsin, contract claims require passage of enabling legislation before a claim can be filed. ${ }^{9}$

Other states have enacted legislation that waives or abolishes sovereign immunity as a defense to lawsuits for breach of contract. ${ }^{10}$ Not all states, however, permit private parties to litigate their contract claims in courts of general jurisdiction. Some states, for example, have a state claims board or Court of Claims to determine claims against the state that arose from contracts entered into by the state. ${ }^{11}$ In Vermont, claims are referred to the transportation board. ${ }^{12}$ In Texas, sovereign immunity for breach of contract is not waived by the act of contracting. ${ }^{13}$ The court, however, noted that, "There may be other circumstances where the State may waive its immunity by conduct other than simply executing a contract so that it is not always immune from suit when it contracts," (emphasis added). ${ }^{14}$

In Aer-Aerotron v. Texas Department of Transportation, ${ }^{15}$ the court held that the Department's immunity from suit was waived by conduct that went beyond the mere act of contracting. In that case, the Department contracted with Aerotron to supply radios for a total contract amount of $\$ 468,550$. In the first year of the contract, the Department increased the number of radios from 125 to 300 , raising the total contract price to $\$ 993,900$. Aerotron alleged, in its complaint, that it had shipped the radios and the Department had accepted them, but failed to pay, forcing Aerotron into bankruptcy. Aerotron further alleged that the State, by accepting goods and services, increasing its order, requesting and receiving technical assistance, and by twice promising to pay the balance due, waived its immunity from suit for breach of contract. The court held that the State waived its immunity from suit by engaging in actions that "fully implicated it in the performance of the contract." ${ }^{16}$

[^2]In Texas Department of Transportation v. Jones Bros. Dirt \& Paving Contrs., ${ }^{17}$ the court held that the contractor's petition for breach of contract must allege facts showing that immunity from suit was waived by conduct that goes beyond the act of contracting. The contractor's failure to make this showing deprived the trial court of jurisdiction over the contractor's breach of contract claim.

## b. Eleventh Amendment Immunity

The Eleventh Amendment to the United States Constitution provides: "The judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States by citizens of another state, or by citizens or subjects of any foreign state."

While the Amendment, by its terms, does not bar suits against a state by its own citizens, the Supreme Court has consistently held that an unconsenting state is immune from suits brought in federal courts by the state's own citizens, as well as citizens of another state. ${ }^{18}$

Eleventh Amendment immunity applies even though a state is not named as a party to the lawsuit, when it is clear that the state is the real party in interest and the state officials are only nominal defendants. ${ }^{19}$

Abrogation of Eleventh Amendment immunity can occur in two ways. First, a state may expressly waive its immunity. ${ }^{20}$ Second, Congress may abrogate the immunity, but only if Congress expresses an intent to do so and the legislation is pursuant to a valid exercise of Congressional power. ${ }^{21}$

Unless Congress abrogates a state's immunity, any suit by private parties in federal court seeking to impose a liability that must be paid from public funds in the state treasury is barred by the Eleventh Amendment. ${ }^{22}$

## 3. Administrative Claim Procedures and Remedies

The administrative procedures used by state transportation agencies to resolve claims are governed by the standard specifications in the agencies' construction contracts. This subpart examines the claims specifica-

[^3]tions used by several state transportation agencies, ${ }^{23}$ and the AASHTO Guide Specifications. These specifications illustrate the elements that a claims specification should contain. In this regard, much of the discussion focuses on the Florida Department of Transportation, ${ }^{24}$ New York, and California, although elements from other state specifications are also examined as part of this discussion.

This subpart also summarizes the internal administrative review practices employed by the states in dealing with contract disputes and the final remedies available to contractors who are dissatisfied with the agencies' decisions.

## a. Claims Specifications

A typical claims specification contains the following elements: (1) notice of the claim, and waiver of the claim if notice is not provided; (2) furnishing of sufficient information to enable the agency to evaluate the claim; (3) an internal administrative process; and (4) a certification stating that the claim is made in good faith and reflects what the contractor believes it is owed. Each of those elements are discussed below.

The first element requires notice of a potential claim. Failure to provide such notice waives the claim. For example, the AASHTO Guide Specification provides in part that the contractor must "[n]otify the Engineer in writing of any intent to file a claim for additional compensation." ${ }^{25}$ This specification also provides that "the Contractor waives any claim for additional compensation if the Engineer is not notified or is not given sufficient access to obtain a strict accounting of the Contractors's actual costs and afforded proper facilities for strict accounting of actual costs."

Prompt notice of a potential claim before any disputed work is performed serves several public purposes. Prompt notice allows the agency to take early steps to change the work, as necessary, to mitigate damages and avoid extra or unnecessary expenses. ${ }^{26}$ It also allows the agency to keep track of the costs associated with the disputed extra work. ${ }^{27}$ Notice provisions for failure to comply with claim filing procedures are judicially enforced. ${ }^{28}$

[^4]The second function of a claims specification is to allow the owner to obtain sufficient information about the claim so that it can determine whether to settle or reject the claim. This function requires the contractor to explain the basis of its claim and the amount of additional compensation sought, including time extensions, if any. The specification also requires the contractor to submit documentation supporting the claim. The language used in the specification to implement this function can be specific or generalized.

The AASHTO Guide Specifications, which serve as a model for many state transportation agencies, provide that the contractor is to provide sufficient detail to enable the engineer to understand the basis for entitlement and resulting costs. They require the following information:

1. Detailed statement providing all necessary dates, locations, and work items affected.
2. The date on which actions or conditions resulting from the claim occurred or became evident.
3. A copy of potential claim forms.
4. Name, title, and activity of each agency employee familiar with the facts of the claim.
5. Name, title, and activity of contractor employees familiar with the facts that are the basis of the claim.

6 . Specific contract provisions that support the claim and a statement of why they support it.
7. Identification of writings and documents and the substance of any material oral communications relating to the claim.
8. Statement as to whether additional compensation or time extension is based on contract provisions or breach of contract.
9. For time extension requests, an analysis of contruction schedule.
10. Amount of specific compensation sought.

The AASHTO Guide Specifications further provide that failure to submit a claim before final payment constitutes a waiver of the claim. ${ }^{29}$

The Florida claims specification ${ }^{30}$ is another good example of a specification that is very specific in enumerating what the claim must contain. This specification requires that the claim contain the following information:

[^5]- A detailed factual statement of the claim, including the items of work affected and pertinent dates.
- An identification of all pertinent documents and the substance of any material oral communications relating to the claim, and the identity of the persons involved in the communications.
- An identification of the provisions of the contract that support the claim, and the reasons why such provisions support the claim, including the provisions of the contract that allegedly have been breached and the actions constituting such breach.
- The amount of additional compensation sought, with a breakdown of the amount showing: 1) job site labor expenses; 2) additional materials and supplies together with invoices and receipts establishing such costs; 3) a list of additional equipment costs claims, including each piece of equipment and the rental rate claimed for it; 4) any other additional direct costs or damages, and all documentation in support thereof; 5) any direct costs or damages and all documentation in support thereof; and 6) a list of the specific dates and the exact number of days sought for a time extension and the basis for entitlement to time for each day for which a time extension is sought, including a detailed description of the events or circumstances that caused the delay.

Under the Florida claims specification, submittal of a written claim containing this type of information is a condition precedent to the contractor bringing any circuit court action, arbitration, or other formal claims resolution proceeding against the Department for additional compensation or time. ${ }^{31}$

The Florida Standard Specifications provide for Notice of Claim for extra work and delay. Generally for extra work, the Florida Standard Specifications require that the contractor submit to the engineer a notice of intention in writing to make a claim for additional compensation before beginning the work on which the claim is based and submit full and complete documentation of the claim as required in the contract within 90 calendar days after final accceptance of the project with an original contract amount of $\$ 3$ million or less, or within 180 calendar days after project acceptance for projects greater than $\$ 3$ million, thus allowing the contractor sufficient time to document its claim. ${ }^{32}$

Notification of claims for delay, differing site conditions, or breach of contract requires the contractor to submit written notice to the engineer within 10 days after commencement of the delay to a controlling work item and to provide a reasonably complete description as to the cause and nature of the delay and possible impacts to the contractor's work. If requesting a time extension, notice is required within 30 days after elimination of the delay. For projects under $\$ 3$ million, complete documentation required by the contract is re-

[^6]quired within 90 days after final acceptance; if the contract is greater than $\$ 3$ million, it is required within 180 days. ${ }^{33}$

To guard against the contractor revising its claim after the claim has been submitted, the Specification prohibits the contractor from increasing the amount of the claim or the basis for entitlement. The Specification provides that:

The Contractor shall be prohibited from amending either the basis of entitlement or the amount of any compensation or time stated for any and all issues claimed in the contractor's written claim submitted hereunder, any circuit court, arbitration or other formal claims resolution proceeding should be limited solely to the basis of entitlement and the amount of any compensation or time stated for any and all issues claimed in the Contractor's written claim submitted hereunder. This shall not, however, preclude a contractor from withdrawing or reducing any of the basis of entitlement and the amount of any compensation or time stated for any and all issues claimed in the contractor's written claim submitted hereunder at any time. ${ }^{34}$
Florida's Specifications also provide that the Engineer shall respond within 90 days of receipt of contractor's claim submittal on contracts with an original contract amount of $\$ 3$ million or less, and within 180 days if the original contract amount is more that $\$ 3$ million. Failure to repond within the 90 - or 180 -day time period is considered a denial of the claim by the engineer. ${ }^{35}$

The audit provisions of the Florida Standard Specifications are also specific. ${ }^{36}$ They enumerate in detail the types of records that may be audited. These include, but are not limited to, daily time sheets, foreman's daily reports, diaries, payroll records, material invoices and purchase orders, lists of company owned equipment, subcontractor payroll certificates, job cost reports, general and subsidiary ledgers used to record costs, and cash disbursement journal and financial statements for all years reflecting the operations on the project, including income tax returns for those years. ${ }^{37}$ A further discussion of audit provisions is contained in Section $6(\mathrm{~A})(6)(\mathrm{b})$ of this study.

Also subject to audit are all documents reflecting the contractor's actual profit and overhead during the years the contract was being performed, and for each of the 5 years prior to the commencement of the contract. Aside from defending against a total cost claim, ${ }^{38}$ the question of whether a contractor makes or loses money on a

[^7]fixed-price, competitively bid contract is ordinarily not legally relevant. An exception may apply where there are large profits and defective work. ${ }^{39}$ But beyond legal relevance is practical relevancy. Did the contractor or subcontractor make or lose money? This type of information can be useful in formulating negotiation strategies, particularly when the contractor has pass-through claims from subcontractors who have suffered large losses and may be on the verge of bankruptcy. ${ }^{40}$

The Florida Specification also requires the contractor to make its bid documents available for audit ${ }^{41}$ and all worksheets used to evaluate the cost components of the claim, including all documents that establish the specific time periods and individuals involved and the hours and wage rates for such individuals.

In addition, a specification should permit the owner to audit depreciation records on all company equipment irrespective of whether those records are maintained by the contractor, its accountant, or others. This should include any other source documents used by the contractor for internal purposes in establishing the actual cost of owning and operating its equipment. ${ }^{42}$ Computer software used to prepare the claim should also be subject to audit. ${ }^{43}$

The audit specifications should provide that, as a condition precedent to recovery on any claim, the contractor, subcontractors, and suppliers must keep sufficient records to support and document their claims. The specification should also provide full access to such records to allow the auditors to verify the claim and make copies of such records, as determined necessary by the auditors. Finally, the specification should provide that failure to retain sufficient records to verify the claim, and failure to provide full and reasonable access to such records, waives the claim or any portion of the claim that cannot be verified. ${ }^{44}$

One final consideration: Care should be taken in selecting the auditor. The auditor may be called upon to testify to his or her findings if the claim is not settled. Thus, consideration should be given not only for the auditor's professional competence, but also for his or her ability as an expert witness.

The third element of a typical claims specification is the administrative process that the agency will follow in reviewing the claim. In general, many transportation agencies utilize a three-step process wherein the initial review is made by the resident engineer. If the claim is not resolved at this level, it will be reviewed at a higher

[^8]level. For example, Arizona follows a three-step process: (1) review by the resident engineer, (2) review by the district engineer, and (3) review by the state engineer. ${ }^{45}$ Oregon has a four-step process with the stated purpose of resolving claims at the lowest possible level in the agency. ${ }^{46}$ The administrative review process used by the states is illustrated in the Table shown later in this subpart.

The agency is required to act in good faith in evaluating the claim, ${ }^{47}$ and moreover, the law presumes that public officials act in good faith in carrying out their duties. ${ }^{48}$ Thus, a claim should not be rejected for minor defects. But what should the agency do when the claim is materially defective? This question can be important because failure to comply with claim procedures may waive the claim. Sending the claim back for more information, however, may waive any defense that the claim is barred because of the contractor's failure to comply with the claim procedures specified in the contract.

To preserve this defense, the letter should specify why the claim is deficient, and that the claim is waived. However, if the agency is willing to leave the door open for future negotiations, the letter may state that the agency is willing to engage in further negotiations, but only with the understanding that to do so will not prejudice the agency's waiver defense, and that the defense will be asserted if the claim is litigated or arbitrated. ${ }^{49}$

The administrative review aspect of a claims specification specifies when the agency will respond to the claim..$^{50}$ Failure to respond constitutes a denial of the

[^9]claim..$^{51}$ If the claim is not resolved at the project level, the contractor may request further review of the claim until the internal administrative process is exhausted. ${ }^{52}$

The fourth and final element is the format for certifying the claim. While there is no standardized format, the contractor is generally required to certify that the claim is true and fully documented. ${ }^{53}$

The AASHTO Guide Specifications for required certification provide that the contractor must certify that the claim is made on good faith, that supporting data is accurate and complete to the contractor's knowledge and belief, and that the claim amount accurately reflects the contractor's actual cost incurred. ${ }^{54}$

The California specifications require that the claim must be accompanied by a notarized certificate certifying, under penalty of perjury and with specific reference to the California False Claims Act, ${ }^{55}$ that the claim for additional compensation and time, if any, is a, "true statement of the actual costs incurred and time sought, and is fully documented and supported under the contract between the parties. ${ }^{י 56}$ The California provisons require the following declaration:

> I declare under penalty of perjury, according to the laws of the State of California, that the foregoing claims, with specific reference to the California False Claims Act (Govt. Code Section 12650 et. seq.), and to the extent the project contains federal funding the U.S. False Claims Act ( 31 USC Sections 3729 et seq.), are true and correct and the declaration was signed on _ (date)

The California Claims Specification ${ }^{58}$ requires that any claim for overhead costs must be supported by an audit report of an independent certified public accountant. But the state may, at its discretion, conduct its own audit of overhead costs. The specification further provides that any costs or expenses incurred by the State in reviewing any claim not supported by the contractor's cost accounting or other records shall be deemed to be damages incurred by the state within the meaning of the California False Claims Act.

In addition, the Caltrans Standard Specifications require the contractor to comply with the provisions of the

[^10]Initial Potential Claim Record, Supplemental Potential Claim Record, and Full and Final Potential Claim Record. The notice requirements of the Initial Potential Claim Record require the Contractor to submit an Initial Potential Claim record within 5 days from the date when a dispute arises due to an act or failure to act by the engineer. The provisions require the engineer to respond within 5 days, and the contractor is required to proceed with the potentially claimed work unless otherwise directed. Thereafter, within 15 days, the contractor is required to submit a Supplemental Potential Claim Record to include the nature and circumstances causing the claim or event, contract specifications supporting the basis of claim, and estimated claim costs and breakdown. The engineer evaluates the information and responds within 20 days. Subsequently, the Contractor is required to submit within 30 days of completion of the claimed work, a Full and Final Potential Claims Record, which provides more detail to include detailed factual account of the events, contract documents supporting the potential claim, itemized breakdown of payment and time adjustments requested, relevant information, copies of cost records, and supporting commnications. The engineer is required to respond within 30 days. If not resolved, the dispute may be elevated to an alternative dispute resolution, which would include a Dispute Resolution Advisor (DRA) if the total bid is from $\$ 3$ million to $\$ 10$ million, or a Dispute Resolution Board (DRB) if the total bid is over \$ 10 million. ${ }^{59}$ A detailed discussion of DRBs and their use in transportation projects is contained in Section 7 of this study.

The claims specifications may contain other features that protect the owner's interests. For example, the Florida Specification enumerates the types of consequential damages that are not recoverable. ${ }^{60}$ These include, but are not limited to, such damages as loss of bonding capacity, loss of bidding opportunities, interest paid on money borrowed to finance the work, and loss of financing. Claim preparation expenses, attorney fees, expert witness fees, and the cost of litigation are also not recoverable. Acceleration costs are also not allowed, except where the contractor was directed by the agency to accelerate the work at the agency's expense.

The Florida Specification ${ }^{61}$ contains two other interesting features. It makes settlement discussions between the contractor and the agency inadmissible in court proceedings or arbitration brought by the contractor. The Specification also provides that no claim can be filed in court or no demand can be made for arbitration until after final acceptance of the contract. ${ }^{62}$

[^11]
## b. State Dispute Resolution Procedures and Remedies

The most common method for resolving state highway construction claims is litigation. Arbitration is a distant second, followed by special courts and boards. These methods vary because of the manner and extent in which the states have waived sovereign immunity.

State transportation agencies use varying methods of dispute resolution, ranging from litigation, mediation, and DRBs to facilitation. A detailed discussion of the alternative dispute provisions is contained in Section 7 of this volume. NYSDOT utilizes a unique process for project closeout called the "gatekeeper" concept wherein the gatekeeper-the chief engineer-at the contractor's request, refers the dispute to a facilitated closeout meeting with the Office of Construction, or to a dispute resolution board, or to the traditional closeout process meeting with NYSDOT's Office of Construction. ${ }^{63}$

The contractor involved in the dispute is required to contact the gatekeeper with a brief decription of the contract work and its preferred method of dispute resolution; to demonstrate that the unresolved dispute involves unique, unusual, and complex construction, engineering, or legal issues; and to demonstrate that the dispute has a monetary value in excess of $\$ 50,000$. The contractor must also have demonstrated a clear commitment to active participation in partnering during the conduct of the contract.

The following State Sovereign Immunity/Administrative Procedures Table lists each state, summarizes how sovereign immunity was waived, and generally describes the internal administrative processes used by each state in reaching a decision on whether to settle or deny a contractor's claim. The Table also summarizes the final remedy available to a contractor who is unwilling to accept the agency's decision.

[^12]| State Sovereign Immunity/Administrative Procedures |  |  |
| :---: | :---: | :---: |
| State | Administrative Procedures | Final Remedy |
| Alabama sovereign immunity judicially waived. State Highway Dept. v. Milton Constr. Co., 586 So. 2d 872 (Ala. 1991). | Agency decision may be appealed to a Claims Committee composed of agency personnel not involved in the project. The Claims Committee decision may be accepted or rejected by the agency head. Contractor may request a hearing by a Claims Appeal Board. The Board is a standing committee composed of three members, one of whom is appointed by the state, one by a contractor's association, and the third jointly by the state and association. The Board's decision is not binding on the state. | Litigation. |
| Alaska sovereign immunity waived by statute. Statute 09.50.250 (express authority to contract waived immunity). | Resident Engineer's decision may be appealed to the Contracting Officer, which in turn may be appealed to the Commissioner of Transportation for a final agency decision. | Litigation. Statute 36.30.685. (Trial de novo if Commissioner's final decision made without a hearing). |
| Arizona sovereign immunity judicially waived. Stone v. Arizona Highway Comm'n, 93 Ariz. 384, 381 P.2d 107, 109 (Ariz. 1963). | Initial decision by the Project Engineer with final review by the State Engineer or his or her representative. | For claims of \$200,000 or less-arbitration pursuant to AAA Construction Industry Rules. Over $\$ 200,000$-litigation in Maricopa County Superior Court. |
| Arkansas retains sovereign immunity, but allows claims to be heard by administrative claims commission, Ark. Code § 19-10-201 et seq. | Initial decision by the Resident Engineer, with successive appeals to the Chief Engineer. | Appeal to the State Claims Commission, which is composed of five members appointed by the Governor, two of whom must be attorneys. Decisions of the Commission may be reviewed by the Legislature. |
| California sovereign immunity judicially waived. Souza \& McCue Constr. Co. v. The Superior Court, 57 Cal. 2d 508, 370 P.2d 338, 20 Cal. Rptr. 634 (1962). | Initial decision by the Project Engineer. Review by District Highway Director. Settlements at the District level may be subject to approval by the Headquarters Construction Department. | Statute makes arbitration the sole remedy. Sections 10240-10240.13, Ch. 1, Div. 2, Public Contract Code. Arbitrator's decision is subject to judicial review for findings of fact not supported by substantial evidence and errors of law. |
| Colorado sovereign immunity judicially waived. Ace Flying Service, Inc. v. Colorado Dept. of Agriculture, 136 Colo. 19, 314 P.2d 278 (Colo. 1957). | Initial decision by Project Engineer, with appeal to the District Engineer and then to the Chief Engineer, who refers the claim to a review board composed of three members: one appointed by the State, one appointed by the contractor, and the third by the two members. Board's recommendation referred to Chief Engineer, who makes the final decision. | Litigation. |
| Connecticut sovereign immunity waived by statute, Conn. Gen. Stats. § 4-160. | Claim may be submitted to claims commissioner, who may authorize suit against state on claim that presents issue of law or | Action must be brought within 1 year of commissioner's ruling in judicial |


| State Sovereign Immunity/Administrative Procedures |  |  |
| :---: | :---: | :---: |
| State | Administrative Procedures | Final Remedy |
|  | fact under which state would be liable if it were private person. | district in which claimant resides, or in Hartford or district in which claim arose if non-resident. |
| Delaware sovereign immunity judicially waived. George \& Lynch, Inc. v. State, 57 Del. 158, 197 A.2d 734, 736 (1964). | Initial decision by the Division Engineer, with an appeal to the Contract Claims Committee and a further appeal to the Secretary of Transportation. | Arbitration by the AAA under the Construction Industry Arbitration Rules. |
| Florida sovereign immunity waived by statute (Fla. Stat. Ann. § 337.19) (2002). | Initial decision at the District level, with appeal to the Claims Review Committee, which is composed of three agency members. Final decision may be made by the Secretary of Transportation. | Litigation claims under $\$ 50,000.00$ may be arbitrated. |
| Georgia State Constitution, Art. 1, Sec. II, Paragraph IX (c) waives sovereign immunity for breach of contract actions. | Initial review by the Project Engineer, with successive appeals to the State Highway Engineer, who has final administrative authority to settle contract claims. | Litigation. |
| Hawaii sovereign immunity waived by statute. Haw. Rev. Stat. § 661. | Initial review by the Resident Engineer, and if not settled, then to the District Engineer. If not settled at that level, then to the Chief Engineer, who has final administrative authority to settle claims. | Litigation. |
| Idaho sovereign immunity judicially waived. Grant Constr. Co. v. Burns, 92 Idaho 408, 443 P.2d 1005, 1009 (Idaho 1968). | Claim filed with the Resident Engineer for determination by the District Engineer. Decision may be appealed to the State Highway Administrator and thereafter to the Transportation Board for a de novo hearing. The Board's decision is not binding. | Litigation. |
| Illinois State Constitution, Art. XIII, Sec. 4, abolished sovereign immunity except as provided by the Legislature. | Claim filed with the Project Engineer for referral to the Engineer of Construction. Claim may be referred to a three-member claims board. The Board makes a recommendation to the Director of Highways, who has final administrative authority. | Three-Judge Court of Claims established by statute (I.R.S. c37 § 439.24 et seq.). No appeal from the court's decision. |
| Indiana sovereign immunity waived by statute. Code § 34-4-161.1. | Claim filed with District. Decision may be appealed to Commissioner. | Litigation. |
| Iowa Code § 613.11 waived immunity to suits against the Department of Transportation for construction contract claims. Judicial waiver. See Kersten Co. v. Dept. of Social Services, 207 N.W.2d 117, 120 (Iowa 1973). | Claim filed with Project Engineer. Contractor may request meeting with the agency for review and final agency decision. | Contractor may elect with agency approval to submit the claim to nonbinding arbitration by three-member panel: one member chosen by contractor, one by agency, and the third by the other two arbitrators. Litigation if nonbinding arbitration fails to settle the claim. |
| Kansas sovereign immunity judicially waived. Parker v. Hufty Rock Asphalt Co., 136 Kan. 834, 18 P.2d 568, 569 (1933). | Claim filed with Area Engineer, with appeal to the Secretary of Transportation, who may either authorize an administrative hearing before a hearing officer or appoint a three-member claims panel. The Secretary may accept or reject the recommendations | Litigation. |


| State Sovereign Immunity/Administrative Procedures |  |  |
| :---: | :---: | :---: |
| State | Administrative Procedures | Final Remedy |
|  | made by the hearings officer or the panel. |  |
| Kentucky sovereign immunity waived by statute. Ky. Rev. Stat. § 45A 245. | Claim filed with the Project Engineer. Successive appeals to the Commissioner of Highways, who may authorize an administrative hearing for a nonbinding recommendation. The Commissioner has final administrative authority to settle the claim. | Litigation. Case tried to the court sitting without a jury. |
| Louisiana State Constitution, Art. 12, Sec. 10(A), waived sovereign immunity. | Claim may be filed with the Project Engineer. Successive appeals to the Chief Engineer, who has the final administrative authority to settle claims. | Litigation. |
| Maine statute waived sovereign immunity. Me. Rev. Stat. tit. 5, § 1510-A. | Claim filed with Project Engineer. Appeal to the Commissioner of Transportation, who has the final administrative authority to settle claims. | Appeal to State Claims Commissioner. Claims heard de novo. Appeal to Superior Court hearing de novo without a jury. |
| Maryland sovereign immunity waived by statute. Md. State Gov’T Code § 12-201(a). | Claim filed with District Engineer, with final decision by the Procurement Officer. | State Board of Contract Appeals. Board decisions, other than those decided under the small claims expedited process, are subject to judicial review. A contractor also has the option of bypassing the Board and going directly to state court. |
| Massachusetts, M. De Matteo Constr. Co. v. Commonwealth, 156 N.E.2d 659 (1959) (Interpreting general law giving superior courts jurisdiction for contract claims against state agencies.). | Agency Claims Committee, which makes recommendation to the Chief Engineer, who submits decisions to the Public Works Commission for approval. The contractor can request the Commission to hold a hearing before an administrative law judge. | Litigation. A contractor may bypass the Commission and go directly to court from an unfavorable decision by the Chief Engineer. |
| Michigan sovereign immunity judicially waived. Hersey Gravel Co. v. State Highway Dept., 305 Mich. 3339 N.W.2d 567, 569 (Mich. 1943). | Claim filed with the District Office. The claim, if not settled, is referred to the Central Office for review and decision. The Chief Engineer/Deputy Director of Highways has final administrative authority to settle the claim. | Court of Claims-One <br> judge sitting without a jury. Court of Claims decisions may be appealed in the same manner as other trial court decisions. |
| Minnesota sovereign immunity waived by statute. Minn. Stat. §§ 3.751, 161.24. | Claim filed with the Project Engineer. If not settled at that level, it is referred to the Assistant District Engineer-Construction. The Claims Engineer has final administrative authority to settle the claim. | Litigation. |
| Mississippi sovereign immunity waived by statute. Miss. Code ANN. § 11-45-1. | Claim filed with Project Engineer, who refers the claim to the District Engineer for review and recommendation and then further referral to the agency Director, who has final administrative authority to settle the claim. | Litigation. Claims of $\$ 25,000.00$ or less may be submitted to the State Arbitration Board composed of three members: one selected by the State, one selected by a contractor's association, and the third by the other two members. Claims over $\$ 25,000.00$ may be arbitrated by agreement of the |


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|  |  | parties. |
| Missouri judicial recognition that sovereign immunity waived by contracting. V.S. D'Carlo Constr. Co. v. State, 485 S.W.2d 52, 56 (Mo. 1972). | Claims filed with the Transportation Commission Secretary and referred to a Claims Committee. The Committee makes a recommendation to the Chief Engineer for determination. The contractor may appeal the Chief Engineer's decision to the Commission or go directly to court. | Litigation. Arbitration may be used under the Uniform Arbitration Act, if the parties agree. |
| Montana judicial recognition that sovereign immunity waived. Meens v. State Bd of Educ., 127 Mont. 515, 267 P.2d 981, 984 (Mont. 1954). | Agency determination following review by the agency Legal Division and audit of the claim. | Litigation. |
| Nebraska sovereign immunity waived by statute. Neb. Rev. Stat. § 25-21, 201. | Claim filed with Project Manager, who refers the claim to the District Engineer. The Director-State Engineer has final administrative authority to settle the claim. | Litigation. |
| Nevada sovereign immunity waived by statute. Nev. Rev. Stat. § 41.031. | Claim filed with Resident Engineer, who forwards the claim to the Highway Claims Review Board, which is composed of an agency member, a Nevada contractor, and a registered professional engineer from the private sector. Board's recommendation submitted to the Agency Director, who has final administrative authority to resolve the claim. | Litigation. |
| New Hampshire sovereign immunity waived by statute. N.H. Rev. Stat. Ann. § 491.8. | Claim filed with the Engineer, whose determination may be appealed by the contractor to the Transportation Commissioner, who has final administrative authority to resolve the claim. | The contractor has a choice: (1) litigation (court hears case sitting without a jury), or (2) an appeal to the Transportation Appeals Board-a threemember board appointed by the Governor. Board decisions may be appealed directly to the State Supreme Court. |
| New Jersey sovereign immunity waived by statute. N.J. Stat. Ann. § 59.13-1 to . 10 . | Claim filed with Regional Director, who may submit claim to the Claims Committee composed of four agency members and a Deputy Attorney General. The Committee submits its recommendation to the Deputy Commissioner for a final determination. | Litigation. A contractor may file suit at any stage in the agency's administrative proceedings. Claims may be submitted to arbitration if the parties agree. |
| New Mexico sovereign immunity waived by statute. N.M. Stat. Ann. § 57-1-23. | Claim filed with the Project Manager, who refers the claim to the District Engineer. The contractor may appeal to the Secretary, who may assign the claim to the agency's Claims Board, which is composed of retired engineers and consultants. The Board makes a recommendation to the Secretary, who has final administrative authority to settle the claim. | Litigation. Claims of $\$ 150,000.00$ or less may be arbitrated if the parties agree. Each party appoints an arbitrator and the two choose the third member. The arbitration proceedings are conducted in accordance with the Uniform Arbitration Act. |
| New York Statute (Ct. Cl. Act., § | Claim submitted to the Engineer, then | 16-member Court of |


| State Sovereign Immunity/Administrative Procedures |  |  |
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| 8) establishes a Court of Claims to hear claims against the State. | Regional Director. Gatekeeper conceptDRB, Construction, or Facilitation. The Commissioner of Transportation has final administrative authority to resolve the claim. | Claims. Claims heard by one judge sitting without a jury. |
| Oklahoma judicial recognition that sovereign immunity waived. State Board of Public Affairs v. Principal Funding Corp., 1975 OK 144, 542 P.2d 503, 505-6 (1975). | Claim filed with Resident Engineer. Appeal to Division Engineer for a hearing if claim is not resolved. Appeal to a threemember Board of Claims appointed by Director and contractor. Board makes recommendation to Highway Commission, which has final administrative authority to resolve the claim. | Litigation. |
| Oregon sovereign immunity waived by statute. Or. Rev. Stat. § 30.320 . | Claim filed with Project Manager, with successive appeals to the State Region Engineer and the State Contract Administration Engineer. If not resolved at those levels, claims between $\$ 25,000$ to $\$ 250,000$ must be submitted to a three-member Claims Review Board for nonbinding arbitration. Board members are selected by the State and the contractor from a panel previously developed by the State and the construction industry. Claims over $\$ 250,000$ may also be submitted to the Board if the parties agree. | For claims under $\$ 25,000$, there is mandatory arbitration by a single arbitrator, pursuant to AAA Construction Industry Arbitration Rules. Contractor may also demand arbitration if the claim is $\$ 250,000$ or less. Litigation for claims over $\$ 250,000$, unless the parties agree to arbitration. |
| Pennsylvania sovereign immunity waived by statute. 62 PA. Cons. Stat. § 1711.1. | Claim filed with District Engineer. Appeals to the Construction Claims Review Committee. | Three-member Board of Claims appointed by the Governor. The Board's decision may be appealed by the State or the contractor to the Commonwealth Court of Pennsylvania. |
| Rhode Island sovereign immunity waived by statute. R.I. GEN. Laws § 37-13.1-1. | Claim filed with agency's construction office. Review by Claims Unit and Claims Board, which submits its recommendation to the Director, who has final administrative authority to settle the claim. | Litigation. Case tried to the court sitting without a jury. |
| South Carolina sovereign immunity waived by statute. S.C. Code Ann. § 57-3-620. | Claim must be made on form provided by the agency and filed with the Resident Construction Engineer. Claim may be supplemented as required by the agency. If the claim is not resolved, it is referred to the Claims Committee appointed by the State Highway Engineer. The Committee makes its recommendation to the State Highway Engineer, who has final authority to resolve the claim. | Litigation. |
| South Dakota sovereign immunity waived by statute. S.D. Codified Laws AnN., § 31-3-24. | Claim must be filed on an agency form with the Project Engineer. The form requires the contractor to furnish additional information as required by the agency. Claim, if not resolved, may be referred to the agency's Claim Committee, which makes | Litigation. |


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|  | its recommendation to the State Highway Engineer, who has final administrative authority to settle the claim. |  |
| Tennessee sovereign immunity waived by statute. Tenn. Code AnN. § 9-8-101 et. seq. | Claim filed with the Project Engineer, with appeals to the Transportation Commissioner, who has final administrative authority to settle the claim. | Three-member Claims Commission appointed by the Governor. The Commission's decision can be appealed in the same manner as any trial court decision. |
| Virginia sovereign immunity waived by statute. VA. Code Ann. 8.01-192, et. seq; Specific authorization for suits on highway contract claims. VA. Code Ann., § 331.382 , et. seq. | Claim filed with Resident Engineer. Review and approval by Chief Engineer. Appeal to Commissioner of Highways. A settlement by the Commissioner is subject to approval by the Attorney General and the Governor. | Litigation. Case tried to the court sitting without a jury. |
| Washington sovereign immunity waived by statute. WASH. REV. Code ch. 4.92.010. Specific authorization for suits and highway contracts. WASH. REv. Code ch. 47.28.120. | Claim filed with Project Engineer. Review and approval by Construction Engineer. If claim denied, an appeal may be made to the Secretary of Transportation. | Arbitration is the sole remedy for claims under $\$ 250,000$ under AAA rules. Litigation for claims over $\$ 250,000$ in the Thurston County Superior Court, unless the parties agree to arbitration. |
| West Virginia sovereign immunity waived by statute. W. VA. Code § 14-2-1 through 29. | Claim filed with Project Engineer. Successive appeals to Highway Commissioner, who has final administrative authority to settle claims. | Litigation. Three-judge Court of Claims. |
| Wisconsin sovereign immunity waived by statute. Wis. Stat. AnN. $\S 775.01$ (statute allows suit if claim denied by Legislature). | Claim filed with the Project Engineer. Successive appeals to the Secretary of Transportation. | Five-member Claims Board. The Board's recommendation is submitted to the Legislature. If the Legislature denies the claim, the contractor may sue. |
| Wyoming sovereign immunity waived by statute. Wyo. Stat. § 24-2-101. | Claim filed with Resident Engineer. Appeal to the Superintendent and Chief Engineer, who has final administrative authority. | Litigation. |

Generally, the states have a similar administrative approach to the resolution of construction claims: A claim is filed with the engineer in charge of the project, usually the project or resident engineer. If the claim is not resolved at that level, the contractor may appeal to higher administrative authority. If the claim is not resolved by the agency through its internal review process, the contractor may pursue its final remedy. At this point, the types of remedies available to the contractor vary.

The most common final remedy for resolving highway construction claims is litigation. ${ }^{64} \mathrm{~A}$ few states use a mix of litigation and arbitration. ${ }^{65}$ Several states specify arbitration as the final remedy for resolving construction claims. ${ }^{66}$ Some states provide for boards or commissions with some judicial review. ${ }^{67}$ This divergence in remedies is due largely to the extent and manner in which sovereign immunity was waived by the state legislatures.

## 4. The Federal and California False Claims Acts-An Overview

The U.S. Government, a number of states, and several major municipalities have enacted legislation dealing with fraudulent claims whose applicability extends to include government transportation construction contracts. ${ }^{68}$ The Federal FCA was originally enacted in 1863 during the Civil War. ${ }^{69}$ The Act was originally aimed at preventing fraud in federal military procurement, a practice that was prevalent during the Civil War.

The Federal FCA contemplates enforcement through federal civil actions and criminal prosecutions and also through state or private civil actions. The Act authorizes the U.S. Attorney General to investigate possible violations, and to commence a civil action on behalf of the government if he or she finds that a person has violated or is violating the Act. ${ }^{70}$ Another provision, codi-

[^13]fied with federal criminal statutes rather than with the Act's civil provisions, authorizes federal criminal prosecutions. ${ }^{71}$ The Act also authorizes "a person" to bring a civil action for violation of the Act, for both the person and the U.S. Government, in the name of the government. ${ }^{72}$ Such actions are referred to as qui tam actions. ${ }^{73}$ The persons who bring them are referred to formally as "relators," and less formally as "whistleblowers."

The provision authorizing qui tam actions has been one of the most distinctive aspects of the FCA from its inception. Due to a spate of qui tam actions during World War II, which were perceived as interfering with the war effort, the Act was amended at that time to discourage such actions. In 1986, however, prompted by new abuses in military procurement, the Act was once again amended ${ }^{74}$ to allow employees to bring qui tam actions against their employers. It has been interpreted sufficiently broadly to authorize such actions by states, as well as by private parties.

As discussed below, the Federal FCA was extensively amended in 2009. Responding to that legislation, TRB and NCHRP commissioned a study of the federal and state false claims statutes in the transportation construction context, which was published in $2011 .{ }^{75}$ This current volume will prevent a brief overview, drawing on that publication; those needing more details are referred to that publication. ${ }^{76}$ The NCHRP study revealed, through a detailed survey of State DOTs and interviews with current and former government officials and private sector experts, that there was considerably less likelihood that private whistleblowers would pursue qui tam false claims actions in highway or bridge construction cases than in other sectors such as Medicaid and pharmaceutical fraud. ${ }^{77}$ Qui tam actions appear destined to play only a relatively limited role in
${ }^{71} 18$ U.S.C. § 287.
${ }^{72}$ The provision authorizing "a person" to bring a civil action in the name of himself or herself and the government is 31 U.S.C. § 3730(b)(1); such actions are also based on violations of 31 U.S.C. 3729.
${ }^{73}$ Qui tam is an abbreviated Latin phrase meaning one who sues for the King and for himself. See Comment, supra note 69, at 341 n .1 . A qui tam action is one brought by an informer pursuant to a statute to recover damages for the government and for himself. Erickson v. Am. Institute of Bio-Sciences, 716 F. Supp. 908 (E.D. Va. 1989).
${ }^{74} 31$ U.S.C. § 3729 (1986).
${ }^{75}$ Eric Kerness \& Peter Shawhan, Identification, Prevention and Remedies for False Claims in Highway Improvement Contracting (NCHRP Legal Research Digest 55, Transportation Research Board, 2011), hereinafter cited as "LRD 55"; available at http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_lrd_55.pdf.
${ }^{76}$ The authors of the 2012 update to this current volume were also the authors of LRD 55.
${ }^{77}$ See LRD 55, supra note 75, at 69-71, discussing specific reasons why major factors that may favor qui tam litigation for Medicaid and pharmaceutical fraud are much less favorable for using such litigation to combat highway and bridge construction fraud.
future enforcement of the FCA for highway and bridge projects. They are still part of the framework of the FCA, however, and so will be included in this summary of the Act's provisions.

## a. 2009 Amendments Redefine the Federal False Claims Act, 31 U.S.C. § 3729

During 2009, Congress approved major new federal expenditures including surface transportation projects as an economic stimulus through enactment of the 2008 ARRA, ${ }^{78}$ and sought to enhance the protection of such expenditures against fraud through enactment of the 2009 FERA. ${ }^{79}$ As part of this effort, Congress enacted comprehensive amendments to the FCA. ${ }^{80}$ Both the terms of the 2009 amendments and statements in legislative history indicated that Congress was responding to, and intended to overrule, recent judicial decisions, including Allison Engine Co. Inc. v. United States ex rel. Sanders, ${ }^{81}$ a U.S. Supreme Court decision issued in 2008, which members of Congress characterized as being contrary to the legislative intent of the Act. ${ }^{82}$ (For a discussion of the ways in which the FERA amendments to the FCA addressed and altered precedents established by prior case law, see the 2011 TRB publication. ${ }^{83}$

As noted above, the FCA both authorizes the U.S. Government to pursue civil and criminal false claims actions against persons violating the Act's provisions; and authorizes states and private parties to pursue federal civil false claims actions against such persons. As amended by FERA, the FCA, specifically 31 U.S.C. § 3729(a)(1), imposes civil false claims liability, including treble damages plus a civil penalty, upon any person who:
A. Knowingly presents, or causes to be presented, a false or fraudulent claim for payment or approval;
B. Knowingly makes, uses, or causes to be made or used, a false record or statement material to a false or fraudulent claim;
C. Conspires to commit a violation of § 3729(a)(1)(A), (B), (D), (E), (F) or (G);
D. Has possession, custody, or control of property or money used, or to be used, by the government and

[^14]knowingly delivers, or causes to be delivered, less than all of that money or property;
E. Is authorized to make or deliver a document certifying receipt of property used, or to be used, by the government and, intending to defraud the government, makes or delivers the receipt without completely knowing that the information on the receipt is true;
F. Knowingly buys, or receives as a pledge of an obligation or debt, public property from an officer or employee of the government or a member of the armed forces, who lawfully may not sell or pledge property; or
G. Knowingly makes, uses, or causes to be made or used, a false record or statement material to an obligation to pay or transmit money or property to the government, or knowingly conceals or knowingly and improperly avoids or decreases an obligation to pay or transmit money or property to the government (sometimes referred to as a "reverse false claim").

FERA also amended the FCA in several other important respects. Under Section 4(a)(1) of FERA, the FCA, specifically 31 U.S.C. § 3729(a)(2) and (3) and § 3729(b), now makes any person violating $\S$ 3729(a) liable to the U.S. Government for the costs of a civil action brought to recover such damages; encourages even culpable witnesses to cooperate by authorizing courts to reduce to double, rather than treble, damages the liability of any person committing a violation who is not subject to pending criminal charges, furnishes federal officials with all known information about the violation within 30 days after first obtaining it, and cooperates fully with the government investigation; and defines the terms "knowing," "knowingly," "claim," "obligation," and "material" in ways that must be considered in litigating FCA cases.

## b. Anti-Fraud Measures by Federal Agencies

Following the Congressional enactment of ARRA and the FERA amendments to the FCA, USDOT and multiple other federal agencies undertook a series of training activities and investigative and enforcement initiatives to deal with false claims and other types of fraud on federal, state, and municipal transportation construction projects, some of which can be expected to have long-term impacts. Agencies pursuing such initiatives included, among others, the USDOT OIG, which conducted nationwide fraud awareness training programs serving state DOT as well as USDOT officials; the Recovery Accountability and Transparency Board created by ARRA; the DOJ Antitrust Division, which joined with the USDOT OIG in conducting fraud-awareness training; ongoing activities by the DOJ's National Procurement Fraud Task Force (NPFTF), established in 2006; and audits by the GAO, which ARRA required to review the use of federal economic recovery funds by
states and localities every 2 months and issue reports. ${ }^{84}$ It should also be noted that significant amendments to the FAR in late 2008 adopted significant new measures to deter, detect, and prevent fraud affecting federal contracts. ${ }^{85}$

## c. What Are False Claims, and Who Can Be Sued?

The FCA, 31 U.S.C. § 3729, provides that any person who knowingly presents or causes to be presented a false or fraudulent claim for payment or approval or knowingly makes or uses or causes to be made a false record or statement material to a false or fraudulent claim is liable to the U.S. Government for a civil penalty of not less than $\$ 5,000$ and not more than $\$ 10,000$ plus three times the amount of damages which the government sustains because of the act of that person. The provisions define claim to mean any request or demand, whether under contract or otherwise, for money or property that is presented to an officer, employee, or agent of the United States.

As indicated above, the FCA sets forth seven grounds for liability. The most often used provisions involve conduct involving knowingly presenting false claims, § 3729(a)(1), and knowingly making or using false records or statements, § 3729(a)(2). In general terms, for transportation construction projects, the provisions of the FCA define a false "claim" as any request for payment, final payment, equitable adjustments, and contract adjustments of any type. ${ }^{86}$

The FCA defines "knowingly" to mean that a person, with respect to information, (1) has actual knowledge of the information, (2) acts in deliberate ignorance of the truth or falsity of the information, or (3) acts in reckless disregard to the truth or falsity of the information. ${ }^{87}$ Submitting a false claim knowing that the claim is false fits within the definition of "knowingly." ${ }^{88}$ Reckless disregard and deliberate ignorance standards are not as easily defined and depend upon an analysis of the specific facts of each case.

Prior to the FERA amendments, some federal courts interpreted the FCA to include a requirement that a false claim had to be presented directly to a federal official, meaning that presentation of a false claim to a state or municipal official was insufficient to trigger the statute's provisions. FERA clarified this by redefining "claim" to include not only a request or demand presented to a federal employee, officer, or agent, but also

[^15]one presented to a contractor, grantee, or other recipient if the money or property requested was to be spent or used on the government's behalf, and if the government had provided any portion of the money or property or would reimburse the contractor, grantee, or recipient for any portion of it. ${ }^{89}$

Some illustrative examples of false claims involving state or municipal federal-aid transportation construction contracts might include, for example, false certifications of payments to subcontractors, payment of Davis-Bacon prevailing wages, or compliance with "Buy America" requirements; implied certifications in applications for progress payments; inflated invoices, inflated or fabricated demands for contract adjustments or additional payments, or adoption of unreasonable interpretations of contract requirements; disadvantage (D)/M/WBE fraud; or use of bid-rigging, collusive bidding, or kickbacks to obtain contracts by fraudulent means. ${ }^{90}$

Who can be sued for false claims? The FCA, 31 U.S.C. § 3729(a)(1), provides that any "person" who engages in specified types of conduct shall be liable for a false claim. False claims litigation has resulted in liability for contractors, subcontractors, material men, vendors, and suppliers who have submitted false claims and false records. FCA actions are not confined to contractors alone. The federal government funds myriad types of programs. Federal funds find their way to both public and private owners, design professionals, and construction managers, so all of these groups have potential exposure to FCA liability. Corporations, design professionals, ${ }^{91}$ and construction managers ${ }^{92}$ may also be held liable for damages under the FCA.

Federal government agencies are immune from FCA liability by virtue of sovereign immunity. ${ }^{93}$ This exemption also applies to FCA actions against federal employees acting within the scope of their employment. States and state agencies may be held liable by the U.S. Government under the FCA, but the U.S. Supreme Court has held that states may not be held liable to private relators in qui tam actions. ${ }^{94}$ Unlike federal and state agencies and officials, municipal public agencies and employees acting within their official capacity can be

[^16]subject to FCA liability, however, since they are "persons" within the meaning of the FCA. ${ }^{95}$

## d. Qui Tam Provisions and the Public Disclosure Bar

While FERA ${ }^{96}$ enacted significant amendments to the provisions of governing what a false claim consists of, ${ }^{97}$ it retained the existing qui tam provisions ${ }^{98}$ largely unchanged, with only some limited revisions to the provisions protecting whistleblowers from retaliation, ${ }^{99}$ along with some amendments to the provisions on U.S. Government intervention in private qui tam actions, ${ }^{100}$ jurisdictional provisions, ${ }^{101}$ and provisions on civil investigative demands in false claims litigation. ${ }^{102}$

A key provision of the $\mathrm{FCA}^{103}$ authorizes "a person" to bring a civil action for violation of the Act, ${ }^{104}$ for the person and the U.S. Government, in the name of the government. The "person" who is authorized to bring such a civil action in the name of the government is known as a qui tam relator. This is an abbreviation of the historical Latin phrase, used in English law, "qui tam pro domino rege quam pro se ipso in hac parte sequitur," meaning someone "who sues on behalf of the king as well as himself." ${ }^{105}$ As one authority on the FCA has noted, the concept of private qui tam actions on behalf of the government has roots in English legal history going back to the fourteenth century, roots in American legal history going as far back as 1692, and forerunners in a variety of state and federal statutes enacted between the Revolutionary War and the Civil War. This concept has been developed further over the course of enactment of the Act during the Civil War and its subsequent amendment. ${ }^{106}$

While the Act does not define the word "person," the concept involves providing an inducement for individual employees of a government contractor with direct knowledge of a concealed fraud by the contractor to

[^17]come forward with that knowledge, as a so-called "whistleblower." The statute does not limit the term "person" to contractors' employees, however, and individuals who are not employees of the defendant, corporations, and even state governments have brought qui tam actions. ${ }^{107}$

The FCA includes a variety of procedural requirements for qui tam actions, ${ }^{108}$ including the following: The person filing the qui tam civil action must do so in the name of the U.S. Government. ${ }^{109}$ A qui tam action may be filed in any federal district court in any district in which the defendant (or, if there are multiple defendants, any one defendant) resides, transacts business, or can be found, or where any act proscribed by 31 U.S.C. § 3729 occurred. ${ }^{110}$ Federal courts shall have pendent jurisdiction over any state or local court actions arising from the same transaction or occurrence as a federal qui tam action. ${ }^{111}$ Qui tam actions must be filed within 6 years after the violation is committed, or within 3 years after a federal official becomes aware of material facts but not more than 10 years after the violation is committed, whichever is later. ${ }^{112}$ Once a relator has filed a qui tam action, the action cannot be dismissed without the consent of the U.S. Government and the court, regardless of whether the U.S. Government decides to intervene in the case. ${ }^{113}$ The complaint must be filed secretly in camera with a federal court and kept under seal for up to 60 days in order to provide the U.S. Government with an opportunity to decide whether or not to intervene in the action. The qui tam relator must serve a copy on the government under FRCP Rule 4(d)(4); the government then has 60 days to decide whether to intervene, and the government can obtain extension of the 60 -day period for good cause shown. If the government decides to intervene, it conducts (i.e., takes over control and litigates) the action; if not, the qui tam relator conducts the action. ${ }^{114}$ As between private parties, the first qui tam relator to file an action wins the race to the courthouse. Once a person has filed such an action, no person other than the government may intervene or file a related action. ${ }^{115}$

If any state or local government is named as a coplaintiff with the United States in any state or local court action governed by 31 U.S.C. § 3732(b), the 60 -day seal imposed following the filing of a qui tam action and

[^18]its service on the U.S. Government shall not prevent the relator and U.S. Government from serving the pleadings and sharing all material evidence with state and local law enforcement authorities involved in such state or local actions, but they too shall be governed by the 60 -day renewable seal imposed in connection with the federal qui tam action. ${ }^{116}$ This provision was added to the FCA by FERA and was the subject of specific comment in its legislative history. ${ }^{117}$

Under another provision enacted by FERA in 2009, if the U.S. Government chooses to intervene in a qui tam action, the government may file its own complaint or amend the complaint filed by the qui tam relator to clarify or add claims. For statute of limitations purposes, such a new or amended complaint shall be considered to relate back to the filing date of the initial qui tam action if it arises from the same conduct, transactions, or occurrences. ${ }^{118}$ The legislative history of FERA indicates that this provision was enacted to address potential issues raised by a Second Circuit ruling in 2006, which suggested that the Government might not be able to avail itself of retroactive amendment of a complaint under FRCP Rule 15(c)(2) in FCA litigation. ${ }^{119}$ If the U.S. Government files a false claims action or intervenes in a qui tam action, it shall be required to prove all essential elements of the cause of action, including damages, by a preponderance of the evidence. ${ }^{120}$ Notwithstanding any other provision of law, the defendant in a civil action under the FCA shall be estopped from denying the essential elements of any offense for which the defendant has been convicted at trial, or to which the defendant has pled guilty or nolo contendere, in any criminal proceeding charging fraud or false statements. ${ }^{121}$ Subpoenas for witnesses in qui

[^19]tam actions may be served at any place in the United States. ${ }^{122}$

The FCA authorizes private qui tam relators to commence actions in the name of the government and retain a portion of the damages recovered in order to motivate private parties with knowledge of concealed fraud against the government to come forward. Unless qualified, however, this could create a risk of parasitic actions. For example, a private party having no direct knowledge of a fraud might learn of its existence through news media coverage of an audit report or public testimony and then commence a qui tam action on that basis. In such a situation, the private party would contribute no direct knowledge and would not deserve any compensation for coming forward but might nonetheless stand to gain an unmerited recovery.

To protect against parasitic actions, the FCA includes a provision known as the "public disclosure bar," enacted in 1986, which prohibits the filing of qui tam actions and states that no court shall have jurisdiction over an action "based upon the public disclosure of allegations or transactions in a criminal, civil, or administrative hearing, in a congressional, administrative or Government Accounting Office report, hearing, audit or investigation, or from the news media. " ${ }^{123}$ The legislative history of the 1986 enactment indicates clearly that the Senate Judiciary Committee was aware of and sought to address this issue. ${ }^{124}$

The situation would be different where there had been media coverage of an audit report or a hearing, but the private party commencing the qui tam action was the original source who came forward with the information and led government auditors or staff to uncover the fraud. In that situation, the private qui tam relator would deserve compensation for coming forward. Addressing this, the FCA creates an exception from the public disclosure bar where the action is filed by the government "or the person bringing the action is an original source of the information. ${ }^{125}$ The statute goes on to define "original source" as "an individual who has direct or independent knowledge of the information on which the allegations are based and has voluntarily provided the information to the government before filing an action...based on the information. "126 The issue of whether a given qui tam relator is or is not an "original source" has been the subject of conflicting judicial

[^20]interpretations and litigation up to and including the U.S. Supreme Court level. ${ }^{127}$

In a 2011 case with potentially major implications for qui tam actions, the U.S. Supreme Court ruled that the public disclosure bar is triggered if the qui tam action is based in part on information obtained by a qui tam relator or a person associated with the relator, from a federal agency pursuant to the FOIA. ${ }^{128}$ In that case, the relator, a Vietnam veteran, had been employed by an elevator manufacturer that held a number of Federal Government contracts subject to a federal statute requiring employers to report to the U.S. Department of Labor concerning how many of their employees were veterans covered by the statute. After the employee resigned from the company based on actions which he perceived as intended to force him out, his wife used FOIA to obtain documents filed by his former employer with the Department of Labor. Asserting that his employer had failed to file many of the required reports, and that many of the reports it filed had included false statements, the employee filed a qui tam action. The Court held that a federal agency response to a FOIA request constituted a "report" within the meaning of the public disclosure bar provisions of the FCA. The Court reasoned that the word "report" had a broad ordinary meaning and that this was consistent with the public disclosure bar, which was generally broad in scope. It found no basis in language of the FAC for imposing a narrower definition of the term. Adopting this interpretation did not undercut the other terms used in the public disclosure bar provision. The Court also took the view that holding the public disclosure bar to be triggered by FOIA responses would not "necessarily lead to unusual consequences," such as defendants precluding qui tam actions by filing FOIA requests themselves. ${ }^{129}$

[^21]The U.S. Supreme Court also ruled in a post-FERA case decided in 2010 that the public disclosure bar is triggered by state as well as federal disclosures. ${ }^{130}$

## e. State False Claims and False Statements Statutes

In addition to the U.S. Government, 26 states and at least 3 major municipalities have enacted legislation dealing with fraudulent claims whose applicability extends to transportation construction contracts. ${ }^{131}$ There are also 27 states that have enacted Medicaid-only false claims legislation. There is some overlap between the groups, since 14 states have enacted both. There are, however, 13 states having only Medicaid false claims statutes, and no false claims statutes that would apply to transportation construction projects. ${ }^{132}$ While less comprehensive than false claims statutes, there are 14 states which have enacted False Statements Acts, which typically authorize prosecution for submission of false written statements to state officials in order to obtain pecuniary or other benefits. ${ }^{133}$ Although six of those states have enacted both FCAs and False Statements Acts, there are eight states in which the False Statements Acts appear to be the only state actions authorizing legal action for fraud against state transportation agencies. ${ }^{134}$

The provisions of the state false claims statutes, while generally modeled to some extent on the Federal FCA, vary considerably. Any agency or party engaged in litigation under a false claims statute must research the state statutory provisions and case law directly, rather than relying on assumptions based on the federal statute. NCHRP's 2011 publication provides cita-

[^22]tions to the state FCAs, brief summaries of their provisions, and further discussion of related issues. ${ }^{135}$

In general terms, while the provisions of state FCAs may not be identical with the Federal FCA or each other, state FCAs typically authorize the state's attorney general (AG) to pursue civil false claims actions and to recover treble damages, plus civil penalties of up to $\$ 10,000$ to $\$ 12,000$, plus attorneys' fees, expenses, and costs. A number of states also authorize their AGs to issue civil investigative demands (CIDs), typically modeled on the Federal FCA CID provisions. Most states require that FCA actions be filed within 3 years after discovery and within 10 years after commission of the underlying acts.

It is also typical for state FCAs to authorize private qui tam actions for treble damages plus attorneys' fees and expenses (although Kansas expressly prohibits qui tam actions); to authorize state AGs to intervene in such actions, and to control the litigation of those cases they intervene in; and to authorize qui tam relators to receive 15 to 25 percent of the total recovery, or up to 30 percent if proceeding alone without the intervention of the state AG (Nevada and Tennessee, however, offer terms more generous to relators).

## f. Practice Guidance for State DOTs on Prevention and Remediation of False Claims

Based on a survey of state DOT officials, the NCHRP's 2011 report on false claims indicated that most false claim cases encountered by state DOTs involved DBE fronts, false certifications, wage rate and hour violations, inflated invoices, false certification of quantities, falsification of materials quality test results, bid-rigging, Buy America violations, overstated costs, and false requests for extra compensation. ${ }^{136}$ The report also found that state DOTs most often addressed potential false claims in reviewing a contractor's submission of a claim during the administration of an active contract or at the contract close-out stage. Approaches to investigating false claims, once identified, ranged from using audit and construction engineering staff, or inhouse claim engineers, to using claim consultants or experts to assist in the discovery process in defending claims litigation. It was rare, however, for sState DOTs to have formal written standards or procedures to review and investigate for false claims during the process of reviewing a contractor's claim. ${ }^{137}$

One of the clearest and most striking findings emerging from the NCHRP report's survey of state DOTs was that, while many state DOTs reported problems with false claims or fraud on highway or bridge projects, and agencies had pursued a number of criminal and civil remedies, state DOTs had made only very limited use of either the Federal FCA or state FCAs to seek civil recovery of damages for false claims or fraud on highway or bridge construction projects. The number

[^23]of qui tam False Claims Act lawsuits involving highway and bridge projects was minimal. Only 5 state DOTs reported being aware of any qui tam actions involving their projects, and they reported a cumulative total for all 5 states of 13 or fewer qui tam cases among them.

The NCHRP's 2011 false claims study did, however, identify a number of potentially promising practices, derived from research and interviews, which state DOTs might wish to consider as methods of detecting, preventing, and deterring false claims. These included:

- Requiring consultants and contractors to establish a Code of Conduct and a Business Ethics Compliance Program, including internal controls.
- Reviewing contractors' records of integrity and business ethics in making responsibility determinations or bid qualification decisions.
- Requiring contractors to disclose involvement in any prior false claims cases in connection with prequalification and bidding responsibility reviews.
- Requiring consultants and contractors with a history of integrity problems to employ IPSIGS or monitors to ensure compliance with relevant law and regulations, and to deter, prevent, uncover, and report unethical and illegal conduct by, within, and against their firms.
- Strengthening claims certification requirements.
- Including failure-to-disclose involvement in prior false claims among the grounds for state suspension, debarment, or findings of non-responsibility.
- Providing fraud awareness training to employees involved in reviewing bids, responsibility issues, contract awards, construction work, requests for payment, requests for orders on contract, construction claims, and compliance with D/M/WBE requirements.
- Pursuing state legislation to conform state false claims statutes to the Federal FCA as amended by FERA.
- Creating a dedicated false claim unit within the state DOT or state AG's office.
- Requiring state DOT attorneys to review all construction claims for potential FCA exposure.
- Incorporating set-off provisions for recovery of false claims investigative costs into the standard terms and provisions of state DOT consultant and construction contracts.
- Pursuing state legislation to adopt a state Contract Disputes Act or other provisions for forfeiture of false claims.
- Dedicating any false claims damage recoveries to supporting future investigations.
- Establishing, maintaining, and publicizing a tollfree telephone hotline to receive allegations of false claims and other waste, fraud, and abuse on a confidential basis.
- Sharing information regarding problem contractors with other state agencies and among state DOTs nationwide.
- Reviewing contract payment requests, contractor requests for orders on contract (change orders), and contract claims on a timely and thorough basis.
- Enhancing the scrutiny of construction firms experiencing other problems, such as financial problems, major performance delays, or recurrent difficulty in meeting contract specifications, for possible false claims.
- Maintaining records of damages after potential false claims were identified.
- Training and requiring state DOT employees to use Red Flag lists such as those maintained by the USDOT, which list common indicators of fraud, bidrigging and collusion, material overcharging, time overcharging, product substitution, DBE fraud, quality-control-testing fraud, bribery, kickback, and conflicts of interest.
- Adopting bid escrow provisions. ${ }^{138}$


## 5. Escrow Arrangements to Preserve Bid Documents

As discussed earlier, the right to audit is an important tool for resolving claims. One area that should be subject to audit is the contractor's bid documents. ${ }^{139}$ Such documents, for example, may be relevant in a total cost claim involving the reasonableness of the contractor's estimated costs, or time for performing the work, as reflected in the bid, ${ }^{140}$ or as a baseline to measure the cost of changes to the work that occur during contract performance. The contractor's bid anticipation may be relevant to many of the issues in a claim or dispute. The right to audit, however, has little value if there is nothing to audit. Recognizing this, some states have included an escrow bid documentation specification in their construction contracts. ${ }^{141}$ This type of specification requires the contractor to place its bid documents with an escrow agent, usually a bank, to ensure that the documents will be available for use by the owner in the event of a claim. ${ }^{142}$

The term "bid documentation" should be broadly defined. The term should include all quantity take-offs, crew size, equipment, and calculations showing esti-

[^24]mated rates of production. The bid documents should include quotations from subcontractors and suppliers whose quotations were used to arrive at the prices contained in the bid proposal. The contractor's allocation of equipment costs, indirect costs, contingencies, markup, and any other costs allocated to and included in bid items should also be included. If the bid documents were developed using computer generated software, the specification should require that the information be furnished in hard copy, and that the contractor identify the name and version of the computer software that was used. ${ }^{143}$

The ODOT bid escrow provisions require the low bidder and the second low bidder to submit the bid documents for escrow the next day after the bid opening. Typical escrow provisions contain sample escrow agreement provisons to be executed by the parties. The sample escrow agreements provide for contractor's indemnification of the escrow agent and for notice requirements and release provisions; and are to be signed by the contractor, ODOT, and the escrow agent. ${ }^{144}$

The specification should contain safeguards to assure that the information is complete and legible. The specification should require the contractor to submit an affidavit with the bid documents listing all of the documents in the escrow container. Section 103.08 of the AASHTO Guide Specifications for highway construction provide that that the contractor is required to submit a signed certified affidavit attesting that the affiant has examined the bid documentation, that the affidavit lists all documents used to prepare the bid, and that the sealed container contains all such bid documentation. The AASHTO Specifications provide, "Certifying that the materials in escrow represent all documentation used to prepare the bid waives the contractor's right to use bid documentation other than those in escrow should a contract dispute arise." The affidavit should be signed by the person authorized to execute bid proposals, attesting that the affiant has personally examined the bid documentation, that the affidavit lists all of the documents used in preparing the bid, and that all of the documentation is included in the container placed in escrow. ${ }^{145}$

The ODOT CMS provisions provide that the ODOT will not use the escrowed documents to assess the contractor's or subcontractor's qualifications for performing the work and that the documents will always remain the property of the contractor or subcontractor, subject to joint review by the department and the contractor or subcontractors. ${ }^{146}$

The ODOT provisions provide that the bid documentation will be examined at any time deemed necessary by either the department or the contractor to assist in

[^25]the negotiation or settlement of a dispute and claim, and that the contractor and subcontractor and department personnel will be present to review the escrowed documents. ${ }^{147}$

After the documents are placed in escrow, the agency can verify the documents to ensure completeness and legibility. Completeness is assured by comparing the documents to those listed in the affidavit. Incomplete submittals or illegible documents may be corrected by a supplemental submittal. The verification process is a practical requirement. To learn after the project is over that the bid documents in the escrow container are incomplete or illegible may be too late. By then, the original documents may be lost or discarded. If the documents are illegible because of poor copying, they would be of little value. Illegible documents rarely refresh memories in depositions.

The bid documents remain in escrow during the life of the contract or until the contractor submits a claim, at which time the documents may be obtained by the owner for its use in evaluating the claim. The owner will instruct the escrow agent to release the bid document container to the contractor after the project is completed and the contractor has signed a release of all claims. ${ }^{188}$

Confidentiality of the bid documents is of serious concern. The AASHTO provisions provide that the agency will make every reasonable effort to ensure confidentiality of the bid documentation. The ODOT specifications state that the department will safeguard the escrow dDocuments and all information they contain against disclosure to the fullest extent permitted by law. ${ }^{149}$ In addition, the cost of the bid escrow is included in contract bid prices, and failure to provide bid documentation renders the bid nonresponsive.

The WSDOT's escrow bid documentation specification was challenged by the Associated General Contractors of Washington in a lawsuit. ${ }^{150}$ Because of Washington's liberal public disclosure laws, ${ }^{151}$ contractors voiced concern about the confidentiality of bid information. They claimed that the information contained trade secrets, the disclosure of which could undermine their competitive positions. ${ }^{152}$ The court upheld the specification. ${ }^{153}$

[^26]
## 6. State Agency Precautions

## a. Inclusion of Risk Allocation Provisions in Contracts

Some state standard contract provisions provide risk allocation provisions specifying that certain risks or occurrences are in contemplation of the parties when the contract is entered into. State agencies use these provisions to help insulate themselves from liability for delays and interference claims.

Florida DOT standard contract provisions contain risk allocation provisions and indicate that the parties anticipate that delays might be caused by and arise from any number of events during the term of the contract, including change orders, supplemental agreements, extra work, differing site conditions, right-ofway issues, permitting issues, actions by third parties, shop-drawing approval delays, etc. The provisions recognize that such delays are specifically contemplated and acknowledged by the parties and shall not be deemed to constitute willful or intentional interference without clear and convincing proof that they were the result of a deliberate act, without reasonable and good faith basis, and specifically intended to disrupt the contractor's performance. ${ }^{154}$

Stronger risk allocation provisions are contained in NYSDOT standard contract provisions, which list 11 instances that are contemplated in the contract and thus serve as ineligible reasons for delay compensation. The contract provides that the contractor has included in its bid for various items any extra or additional costs attributable to any delays, inefficiencies, or interference in the performance of the contract caused or attributable to specified events. Some of the instances of noncompensable delays include extra work that does not significantly affect the overall completion of the project, climatic conditions, restraining orders, injunctions, increase in contract quantities below 25 percent, strikes, presence or work by third parties on the contract site, and award of the contract beyond 45 days. A complete discussion of these provisions is contained in Section 1(B)(5) of this study; ${ }^{155}$ however, NYSDOT's Standard Specifications do permit delay compensatrion for differing site conditions, significant changes to the character of the work, and suspension of the work directed by the engineer.

## b. Contract Audit Provisions

Several state transportation specifications require contractors to provide access to various accounting and job records, which are necessary for review and analysis of claims and disputes. Providing a list of records in the base contract minimizes record disputes and greatly assists in claim resolutions. The right to audit provisions give owners rights to review various accounting documents and help to deter frivolous undocumented claims. The AASHTO Guide Specifications provide that

[^27]the contractor, subcontractor, or suppliers shall cooperate with the agency and provide access to the following documents: daily time sheets and foreman's daily reports, union agreements, insurance welfare and benefit records, payroll register, earning records, payroll tax returns, material invoices, purchase orders, material cost distribution worksheets, equipment records, vendor rental agreements, subcontractor payment certificates, cancelled checks, job payroll ledger, general ledger and subsidiary ledgers and journals, cash disbursement journals, income tax returns, financial statements, depreciation records, bid preparation documents, all documents reflecting actual profit and overhead during contract performance and each of the 5 years before starting the project, all documents used to develop the contractor's equipment ownership costs for internal purposes, and worksheets used to prepare the claim and establish cost component of claim items. ${ }^{156}$

It should be noted that review of tax returns as to past profits, job cost ledgers as to actual costs, and financial statements as to overhead and equipment costs can have significant impact on damage defense positions.

Florida DOT Standard Specifications Section 5-14, Auditing of Claims, provides that a state audit may be performed by employees of the department or by an independent auditor appointed by the department. The provisions indicate that as a condition precedent to recovery on any claim, the contractor, subcontractor, or supplier must retain sufficient records and provide full and reasonable access to such records. Failure to retain sufficient records of the claim and failure to provide reasonable access to such records shall constitute a waiver of that portion of such claim that cannot be verified and shall bar recovery. The provision further mandates the contractor to make available for copying, at the department's expense, a list of records, which is nearly identical to the AASHTO listing specified above.

NYSDOT Standard Specifications Section 105 G, the right-to-audit provision, contains a similar list of records that are to be made available but does omit income tax returns from the list. The New York provisions provide that failure to maintain and retain sufficient records shall constitute a waiver of that portion of that dispute that cannot be verified and shall bar recovery thereunder and that failure to substantially furnish the required accounting records shall constitute a waiver of that portion of the dispute for payment, other than for payment at contract unit prices for the work perfomed.

## B. CONTRACTORS' CLAIMS AGAINST OWNERS AND DESIGN PROFESSIONALS

## 1. Introduction

Contracts are based on expectations. The law protects those expectations by providing a remedy when they are not fulfilled, due to some default by the other contracting party. "The controlling policy consideration underlying the law of contracts is the protection of expectations bargained for." ${ }^{157}$ The expectations that the contractor has bargained for are to complete the project on time and make a profit. Usually, it's when these expectations are not fulfilled that claims arise.

Generally, claims by contractors against owners may be grouped into categories. This Subsection discusses those categories. ${ }^{158}$ Before discussing the various theories of liability, mention should be made about some of the differences between public and private construction contracts. In addition to the procedural limitations imposed by sovereign immunity, ${ }^{159}$ government contracts may also implement social and economic policies as part of the public works contracting process. Minority and Disadvantaged Business Enterprise Requirements ${ }^{160}$ and labor and wage standards ${ }^{161}$ are some examples.

Although public and private contracts differ in many respects, generally speaking a state, by entering into a contract with a private party for goods and services, absent a statute or contractual provision to the contrary, waives its sovereign immunity and impliedly consents to the same liabilities as a private party. ${ }^{162}$ This Subsection discusses those liabilities.

## 2. Contract Interpretation

Disputes about what the contract requires are a fertile source for claims by contractors. The contracting parties may disagree about how certain work should be paid for, ${ }^{163}$ the scope of the work called for by the con-

[^28]tract, ${ }^{164}$ and the responsibility for events occurring during contract performance that affect the work. ${ }^{165}$ When the parties disagree about the contractual rights and duties, they may resort to litigation asking the court to interpret their contract. ${ }^{166}$

## a. Principles of Contract Interpretation

When parties to a contract dispute the meaning of their agreement and resort to litigation, the court will examine the contract language to determine whether it is ambiguous. ${ }^{167}$ The court's basic purpose in interpreting the contract is to give effect to the intention of the parties as it existed when they entered into their contract. ${ }^{168}$ Only the objective intentions of the parties, as expressed in their contract, is relevant.

If, however, it were proved by twenty bishops that either party, when he used the words, intended something else than the usual meaning which the law imposes upon them, he would still be held, unless there were some mutual mistake or something else of the sort. Of course, if it appear by other words, or acts, of the parties, that they attribute a peculiar meaning to such words as they use in the contract, that meaning will prevail, but only by virtue of the other words, and not because of their unexpressed intent. ${ }^{169}$

Contract interpretation begins with the plain language of the contract to determine whether the language is ambiguous. ${ }^{170}$ In analyzing the language, the court will prefer an interpretation that gives a reasonable and consistent meaning to all parts of the contract,

[^29]avoiding, if possible, an interpretation that leaves a portion of the contract meaningless, superfluous, or achieves an unreasonable or absurd meaning. ${ }^{171}$

The interpretation of a contract is a matter of law. ${ }^{172}$ Only when a contract is ambiguous will extrinsic evidence be considered in interpreting the contract. ${ }^{173}$ Usually when the contract language is clear and unambiguous, the court will not consider extraneous circumstances, such as prior negotiations or trade practices for its interpretation. ${ }^{174}$ This is generally referred to as the "plain meaning" rule and is applied in most states. ${ }^{175}$

A few states follow the "context" rule of contract interpretation rather than the "plain meaning" rule. ${ }^{176}$ Under the "context" rule, an ambiguity in the meaning of the contract need not exist before evidence of the circumstances surrounding the making of the contract is admissible to ascertain the parties' intent. The Parol Evidence rule is not violated because the evidence is not offered to contradict or vary the meaning of the agreement. To the contrary, it is being offered to explain what the parties may have intended.

The "context" rule is based on the premise that the uncertainties of language in clearly expressing intent make ambiguity an unreliable test for determining what the parties actually intended. The Arizona Supreme Court in commenting on the "context" rule said:

> Under the view embraced by Professor Corbin and the Second Restatement, there is no need to make a preliminary finding of ambiguity before the judge considers extrinsic evidence. Instead, the court considers all the proffered evidence to determine its relevance to the parties' intent and then applies the parol evidence rule to exclude from the fact finder's consideration only the evidence that contradicts or varies the meaning of the agreement....

The "context" rule should not apply where one of the parties did not participate in the drafting of the con-

[^30]tract. ${ }^{178}$ Likewise, the "context" rule should not apply to public works that are competitively bid based on contract documents furnished by the owner. ${ }^{179}$

States that follow the "plain meaning" rule and the "context" rule are shown in the following Table.

[^31]| STATE | "PLAIN MEANING" RULE | "CONTEXT" RULE | CITATION |
| :---: | :---: | :---: | :---: |
| Alabama | X |  | Pacific Enterprises Oil Co. v. Howell Petroleum Corp., 614 So. 2d 409, 414 (1993) |
| Alaska |  | X | Stepanav v. Homer Elec. Ass'n, 814 P.2d 731, 734 (1991) |
| Arizona |  | X | Taylor v. State Farm Mut. Auto Ins. Co., 854 P.2d 1134, 1140 (1993) |
| Arkansas | X |  | City of Lamar v. City of Clarksuille, 863 S.W.2d 805, 810 (1993) |
| California | X |  | Brookwood v. Bank of America., 53 Cal. Rptr. 2d 515, 517 (1996) |
| Colorado | X |  | Peters $v$. Smuggler-Durant <br> Corp., 910 P.2d 34, 41-42 (1995)  |
| Connecticut | X |  | Herbert S. Newman \& Partners $v$. CFC Constr. Ltd., 674 A.2d 1313, 131718 (1996) |
| Florida | X |  | Emergency. Assocs. v. Sassano, 664 So. 2d 1000, 1002 (Fla. App. 1995) |
| Georgia | X |  | Hartley-Selvey <br> v. Hartley, 410 <br> S.E.2d 118, $120(1991)$   |
| Idaho | X |  | City of Idaho Falls v. Home Indem. Со., 888 P.2d 383, 386 (1995) |
| Illinois | X |  | Klemp v. Hergott Group, 641 N.E.2d 957, 962 (IIl. App. 1994) |
| Indiana | X |  | In re. of Forum Group, Inc., 82 F.3d 159, 163 (7th Cir. 1996) (Applying Indiana Law) |
| Iowa | X |  | Howard v. Schildberg Constr. Co., 528 N.W.2d 550, 554 (1995) |
| Kansas | X |  | D.R. Lauck Oil Co. v. Breitenback, 893 P.2d 286, 288 (Kan. App. 1995) |
| Louisiana | X |  | Lewis v. Hamilton, 652 So. 2d 1327, 1329 (1995) |
| Maryland | X |  | Taylor v. Feissner, 653 A.2d 947, 955 (Md. App. 1995) |
| Massachusetts | X |  | J.F. White Contracting Co. v. Mass. Bay Transp. Auth., 666 N.E.2d 518 (Mass. App. 1996) |
| Michigan | X |  | Pierson Sand \& Gravel Inc., 851 F. Supp. 850, 858 (W.D. Mich. 1994) (Applying Michigan Law) |
| Minnesota | X |  | Michalski v. Bank of Am., 66 F.3d 993, 996 (8th Cir. 1995) (Applying Minnesota Law) |
| Mississippi | X |  | Century 21 Deep S. Properties, v. Keys, 652 So. 2d 707, 716 (1995) |
| Missouri | X |  | Lake Cable Inc. v. Trittler, 914 S.W.2d 431, 435-6 (Mo. App. 1996) |
| Montana | X |  | $\begin{aligned} & \text { Carbon County v. Dain Bosworth } \\ & \text { Inc., } 874 \text { P.2d 718, } 722 \text { (1994) } \end{aligned}$ |
| Nebraska | X |  | $\begin{aligned} & \text { C.S.B. Co. v. Isham, } 541 \text { N.W. } 2 \mathrm{~d} \\ & \text { 392, } 396(1996) \end{aligned}$ |
| New Jersey | X |  | Sons of Thunder Inc. v. Borden Inc., 666 A.2d 549, 559 (N.J. Super. A.D. |


| STATE | "PLAIN MEANING" RULE | $\begin{aligned} & \text { "CONTEXT" } \\ & \text { RULE } \end{aligned}$ | CITATION |
| :---: | :---: | :---: | :---: |
|  |  |  | 1995) |
| New Mexico |  | X | C.R. Anthony Co. v. Loretto Mall Partners, 817 P.2d 238, 242 (1991) |
| New York | X |  | Cook v. David Rozenholc \& Associates, 642 N.Y.S.2d 230, 232 (App. Div. 1996) |
| North Carolina | X |  | Estate of Waters v. C.I.R., 48 F.3d 838, 844 (4th Cir. 1995) (Applying North Carolina Law) |
| North Dakota | X |  | Jones v. Pringle \& Herigstad, 546 N.W.2d 837, 842 (1996) |
| Ohio | X |  | Stone v. Nat. City Bank, 665 N.E.2d 746, 752 (Ohio App. 1995) |
| Oregon | X |  | Housing Auth. of Portland v. Martini, 917 P.2d 53, 54 (Or. App. 1996) |
| Pennsylvania | X |  | Holt v. Dept. of Pub. Welfare, 678 A.2d 421, 423 (Pa. Commw. 1996) |
| Rhode Island | X |  | Clark-Fitzpatrick, Inc. v. Franki Foundation Co., 652 A.2d 440, 443 (1994) |
| South Carolina | X |  | Friarsgate, Inc. v. First Fed. Sav. \& Loan Ass'n., 454 S.E.2d 901, 905 (1995) |
| Tennessee | X |  | Cummin's v. Vaughn, 911 S.W.2d 739, 742 (Tenn. App. 1995) |
| Texas | X |  | Gen. Devices Inc. v. Bacon, 888 S.W.2d 497, 502 (Tex. App. 1994) |
| Vermont |  | X | Isbrandsen v. North Branch Corp., 556 A.2d 81, 84 (1988) |
| Virginia | X |  | Capitol Commercial Properties, Inc. v. Vina Enterprises, Inc., 462 S.E.2d 74, 77 (1995) |
| Washington |  | X | Berg v Hudesman, 801 P.2d 222, 228 (Wash. 1990) |
| Wyoming | X |  | Treemont, Inc. v. Hawley, 886 P.2d 589, 592-3 (1994) |

If the meaning of the contract is unclear, the court may employ certain general rules in interpreting what it means. ${ }^{180}$ The rules are only aids to assist the court in determining what the parties intended when they entered into their contract. ${ }^{181}$ When a contract is subject to two or more possible interpretations, one of which is reasonable and the other or others are not, the court will adopt the interpretation that gives a reasonable and effective meaning to all of the contract provisions. ${ }^{182}$ An interpretation that is unreasonable will be rejected. ${ }^{183}$

[^32]Another standard rule is that words will be given their plain and ordinary meaning, unless the context in which they are used makes it clear that they have a special or technical meaning. ${ }^{184}$ The court may apply its own understanding of what the words mean, ${ }^{185}$ or it may use a dictionary to define the meaning of the words. ${ }^{186}$ Another standard rule is that specific provi-
pretation as to the appropriate payment rate for certain excavation materials).
${ }^{183}$ Metric Contractors, Inc. v. United States, 44 Fed. Cl. 513,521 (1999) (court found, as a matter of law, that the contractor's interpretation that it was not required by the contract to install certain equipment was unreasonable).
${ }^{184}$ Western States Constr. Co. v. United States, 26 Ct. Cl. 818 (1992).

185 A-Transport Northwest Co. v. United States, 36 F.3d 1576, 1583-84 (Fed. Cir. 1994).
${ }^{186}$ Akron Pest Control v. Radar Exterminating Co., 216 Ga. App. 495, 455 S.E.2d 601, 602-03 (1995).
sions will govern or qualify general provisions. ${ }^{187}$ But this rule will not apply where other provisions of the contract clearly resolve any conflict between a specific provision and a general provision. ${ }^{188}$ Applying these rules and other maxims of interpretation, ${ }^{189}$ it is the court's function to ascertain and give effect to the parties' intent. It is not the court's function "to re-write the provisions of the contract when the terms of the contract, taken as a whole, are clear." ${ }^{190}$

## b. Order of Precedence Clauses

Government construction contracts often consist of a number of documents, such as standard specifications, special provisions, amendments to the standard specifications, plans, and cross-sections. ${ }^{191}$ Some of these documents may conflict with each other. To resolve inconsistencies between the documents, the contract may contain an Order of Precedence clause that specifies which of the conflicting documents takes precedence over the other, thus resolving the conflict. ${ }^{192}$ For example, the clause may provide that the contract plans take precedence over the special provisions, so that if there is a conflict between the two, the plans will govern. ${ }^{193}$ The clause is a practical way of resolving conflicting provisions that would otherwise make the contract ambiguous. The clause has been consistently recognized as a valid and effective agreement by the parties as to how such conflicts are to be resolved. ${ }^{194}$

## c. Resolving Contractual Ambiguities

When the court is unable to determine the meaning of the disputed language using the rules of contract interpretation, the court may admit parol evidence to resolve the ambiguity. ${ }^{195}$ The evidence may consist of a

[^33]course of dealings between the parties, or trade practices that are relevant to the dispute. ${ }^{196}$ How the parties act during contract performance "before the advent of controversy, is often more revealing than the dry language of the written agreement by itself." ${ }^{197}$ When parol evidence is admitted to explain the parties' intent, their intent is no longer a question of law but is a question of fact for the trier of fact to determine. ${ }^{198}$

When a contract is susceptible to more than one reasonable interpretation, it is ambiguous. ${ }^{199}$ If the ambiguity is not resolved, the language will be construed against the party that drafted the language. ${ }^{200}$ This is the rule of Contra Proferentem. Its purpose is to protect the party who did not create the ambiguity by construing the ambiguity against the party who wrote it. ${ }^{201}$ Ordinarily, the public agency drafts the contract documents. Thus, the ambiguity is usually construed against the agency and the contractor's interpretation is controlling. The rule of Contra Proferentem has its limits. A bidder cannot take advantage of a patent ambiguity. The bidder has a legal duty to inform the owner about the error. Failure to do so bars any claim for extra compensation that could have been avoided had the error been disclosed to the owner. ${ }^{202}$ This duty exists regardless of the reasonableness of the contractor's interpretation so long as the ambiguity is obvious. ${ }^{203}$ In J.H. Berra Constr. v. Missouri Hwy. \& Transp. Com$m ' n$, the court said:

Corbin on Contracts, § 583 (1993) (int. ed.); 1 Williston on CONTRACTS, § 33:1 (4th ed. 1999).
${ }^{196}$ Sea-Land Service, Inc. v. United States, 213 Ct. Cl. 555, 553 Fed. 651, 658 (1977); Max M. Stoeckert, d/b/a Univ. Brick \& Tile Co. v. United States, 183 Ct. Cl. 152, 391 F.2d 639, 645 (Ct. Cl. 1968); Restatement of Contracts §§ 222-23 (2d 1979).
${ }^{197}$ Macke Co. v. United States, 199 Ct. Cl. 552, 556, 467 F.2d 1323, 1325 (1972).
${ }^{198}$ Hillis Motors, Inc. v. Haw. Auto. Dealers Ass'n, 997 F.2d 581, 588 (9th Cir. 1993).
${ }^{199}$ R.W. Dunteman Co. v. Village of Lombard, 281 Ill. App. 3d 929, 666 N.E.2d 762 (1996); Metric Contractors, Inc. v. NASA, 169 F.3d 747, 751 (Fed. Cir. 1999); Dick Enters. v. Department of Transp., 746 A.2d 1164, 1170 (Pa. Commw. 2000); Community Heating \& Plumbing Co. v. Kelso, 987 F.2d 1575, 1579 (Fed. Cir. 1993); Mayer v. Pierce County Medical Bureau, 80 Wash. App. 416, 909 P.2d 1323, 1326 (1995).
${ }^{200} 5$ CORBIN ON Contracts, § 24.27 (rev. ed. 2001).
${ }^{201}$ Mastrobuono v. Shearson Lehman Hutton, 514 U.S. 52, 63, 115 S. Ct. 1212, 131 L. Ed. 2d 76 (1995); Metric Contractors, Inc. v. United States, 44 Fed. Cl. 513, 523 (1999), United States v. Seckinger, 397 U.S. 203, 216, 905 S. Ct. 880, 25 L. Ed. 2d 224 (1970).
${ }^{202}$ D'Annunzi Bros. v. N.J. Transit Corp., 245 N.J. Super 527, 586 A.2d 302, 304 (1991); Sipco Services \& Marine, Inc., v. United States, 41 Fed. Cl. 176, 215 (1998). Blount Bros. Constr. Co. v. United States, 171 Ct. Cl. 478, 346 F.2d 962, 971-72 (Ct. Cl. 1965); see also Section 5, Subsection B(6), "Nondisclosure," supra.
${ }^{203}$ Fortec Constructors v. United States, 760 F.2d 1288, 1291 (Fed. Cir. 1985).

Case law has held that this type of policy, known as the patent ambiguity doctrine, "was established to prevent contractors from taking advantage of the government, protect other bidders by assuring that all bidders bid on the same specifications, and materially aid the administration of government contracts by requiring that ambiguities be raised before the contract is bid, thus avoiding costly litigation after the fact...." ${ }^{204}$
The duty to seek clarification of a patent ambiguity may also be imposed by an express contract provision. The following is an example of this type of clause:

> The contractor shall take no advantage of any apparent error or omission in the plans or specifications. If the contractor discovers such an error or omission, he shall immediately notify the engineer. The engineer will then make such corrections and interpretations as may be deemed necessary for fulfilling the intent of the plans and specifications. ${ }^{205}$

In determining whether the ambiguity is patent, the court views the language from the position of a reasonably prudent contractor. ${ }^{206}$ However, a contractor is entitled to rely on an Order of Precedence clause in the contract and need not seek clarification if the ambiguity is resolved by that clause. ${ }^{207}$

## 3. Breach of Contract Claims and Equitable Adjustments Under Specific Contract Clauses

As a general rule, a contractor cannot sue for breach of contract when the claim arose under a specific contract clause providing for a price adjustment. ${ }^{208}$ Often, damages for breach of contract and an equitable adjustment under the contract are priced in the same manner. This is consistent with the purpose in awarding compensatory damages for breach of contract and compensation based on an equitable adjustment. Both are designed to put the contractor in the same economic position it would have been in if the breach, ${ }^{209}$ or the change, ${ }^{210}$ had not occurred. There are instances, however, where the amount of compensation will vary de-

[^34]pending on the legal theory upon which the claim is based. For example, a claim based on breach of contract for adverse site conditions may include compensatory damages for the affect of the condition upon unchanged work. Under many DSC clauses, the equitable adjustment provisions of the clause prohibit recovery for impact costs. Thus, in defending claims, care should be taken to assure that the claim is based on the appropriate legal theory.

Aside from considerations about damages, ${ }^{211}$ claims based on breach of contract and contact price adjustment clauses have two things in common: a contractual basis for the claim and the requirement of causation. The contractual basis for breach may be the owner's failure to perform an express or implied promise in the contract. ${ }^{212}$ The contractual basis for an equitable adjustment is a specific contract clause that provides for price adjustment in the contract amount and/or an extension of contract time if certain events covered by the clause occur during contract performance. The DSC clause, the Changes clause, and the Suspension of Work clause are some examples. ${ }^{213}$

Once the contractual basis for the claim is established, the contractor must prove that there is a causal link or nexus between the contractual right asserted and the event that caused the injury. Suppose, for example, that the contract provided that the project site would be available to the contractor when the contract was signed by the owner. The contract is signed, but the site is not available, causing the contractor to stand by until the site is available. There is a causal link be-

[^35]tween the right asserted (the contractual right to begin work when the contract was executed) and the event (site not available) that caused the contractor to incur additional expense. The additional costs are factually tied to the event-the non-availability of the site as promised in the contract. The next step in the process is for the contractor to prove damages, which is discussed in the next subsection.

## 4. Subcontractor Pass-Through Claims

There is no contractual privity of contract between the project owner and a subcontractor. ${ }^{214}$ In the absence of privity, a subcontractor has no standing to sue the owner contractually, either directly or as a third beneficiary of the contract between the owner and the prime contractor. ${ }^{215}$ But the owner may be liable to a subcontractor on a pass-through basis.

When a public agency breaches a construction contract with a contractor, damage often ensues to a subcontractor. In such a situation, the subcontractor may not have legal standing to assert a claim directly against the public agency due to a lack of privity of contract, but may assert a claim against the general contractor. In such a case, a general contractor is permitted to present a pass-through claim on behalf of the subcontractor against the public agency.... ${ }^{216}$
Although the subcontractor has no standing to sue the owner, it can sue the prime with whom it has privity. The prime in turn can sue the owner "passingthrough" the subcontractor's claim. Usually the prime and the subcontractor will enter into an agreement in which the prime agrees to pursue the sub's claim against the owner and pay any recovery to the sub. In exchange, the sub waives its claims against the prime. The agreement will contain language that it is not a release of the subcontractor's claim. This is to avoid any argument that the claim is waived under the Severin doctrine.

Under the Severin doctrine, a prime contractor may sue an owner for damages that the owner caused the subcontractor only when the prime contractor seeks reimbursement for damages it paid the subcontractor,

[^36]or when the prime contractor remains liable to the subcontractor for damages. ${ }^{217}$ In Severin, both the prime contractor and the subcontractor incurred damages because of owner delay. The prime was allowed to recover its damages, but it was not allowed to recover on behalf of its subcontractor. The prime contractor was not liable to its subcontractor because the subcontract contained a clause waiving delay damages. Since the prime contractor was not liable to the subcontractor, the owner was not liable for the subcontractor's damages. The rule has been stated as follows:

Since our decision in the Severin case, supra, this court has repeatedly delineated the only ground's upon which a prime contractor may sue the government for damages incurred by one of its subcontractors through the fault of Government. The decided cases make it abundantly clear that a suit of this nature may be maintained only when the prime contractor has reimbursed its subcontractors for the latter's damages or remains liable for such reimbursement in the future.... ${ }^{218}$
The burden, however, is on the owner to show that the prime contractor has no legal obligation to share any recovery with the subcontractor. In Blount Bros. Constr. Co. v. United States, the court said: "To come under the 'Severin' Doctrine the defendant must show, through some contractual terms or a release, that the plaintiff-prime is not liable to the subcontractor." ${ }^{219}$ This is consistent with the rule that standing to sue is an affirmative defense for the owner to raise and prove. ${ }^{220}$

The Severin doctrine does not apply to a subcontractor claim for an equitable adjustment when the equitable adjustment clause in the prime contract is included in the subcontract, either directly or by incorporation through a flow-down clause unless the owner can prove that the subcontractor has released or waived its claim. ${ }^{221}$

[^37]A typical flow-down clause provides that the subcontractor is obligated to the prime contractor to the same extent as the prime contractor is obligated to the owner and that the subcontractor is entitled to the same rights granted the prime contractor by the owner under the main contract. ${ }^{222}$ For example, the DSC clause in the prime contract may be incorporated into the subcontract by the flow-down clause and a DSC claim may be asserted by a prime contractor against the owner on behalf of the subcontractor. ${ }^{223}$ Where, however, the DSC clause is not incorporated into the subcontract, there is no contractual basis for a DSC claim. ${ }^{224}$

The prime contractor's pass-through claim against the owner cannot exceed the amount of the prime contractor's liability to the subcontractor. ${ }^{225}$ The prime contractor, however, is entitled to a markup on the amount it recovers on behalf of its subcontractors. ${ }^{226}$

## 5. Other Theories of Recovery

## a. Unjust Enrichment

Unjust enrichment is a theory imposed by operation of law. The theory is based on the principle that a person unjustly enriched should be legally required to make restitution for the benefits received, if doing so does not violate any law, or conflict with an express provision in the parties' contract. ${ }^{227}$ The theory usually arises in situations where there is no express contractual basis for recovery. ${ }^{228}$ Recovery based on unjust enrichment is not permitted where it is barred by sovereign immunity, ${ }^{229}$ violates a statute, ${ }^{230}$ or conflicts with

[^38]${ }^{229}$ Gregory v. Hunt, 24 Fed. 3d 781(6th Cir. 1994) (court applied Tennessee law holding that sovereign immunity was waived only with respect to breach of an express, written contract and that sovereign immunity barred a claim based on an implied contractual obligation); Cleansoils Wisconsin, Inc. v.
an express contract provision that covers the subject matter of the claim. ${ }^{231}$

To recover for unjust enrichment, a contractor must prove: (1) that a benefit was conferred; (2) that the owner knew that it was being conferred; and (3) that it would be inequitable for the owner to retain the benefit without paying for its value. ${ }^{232}$ There cannot be any recovery where the contractor had no reasonable expectation of being paid for its services. ${ }^{233}$

The value of the benefit is determined on a quantum meruit basis. ${ }^{234}$ The value of the benefit is measured by the actual costs the contractor incurred in performing the work. ${ }^{235}$ But those costs will be disallowed to the extent they are shown to be excessive or unreasonable. ${ }^{236}$

## b. Mutual Mistake of Fact

Another possible theory of recovery is mutual mistake. A mutual mistake occurs when contracting parties erroneously believe that some basic fact that affects contract performance is true. One party may seek to reform the contract so that it reflects what the parties actually intended. ${ }^{237}$ The common law doctrine of mutual mistake has been applied by the Court of Claims to allow a contractor to recover additional performance costs caused by a mutual mistake about the necessity

State Dep’t of Transp., 229 N.W.2d 903, 910 (Wis. App. 1999) (State did not consent to be sued for unjust enrichment); But see J. A. Sullivan Corp. v. Commonwealth, 397 Mass. 789, 494 N.E.2d 374, 377 (1986) (State could not avoid claim for unjust enrichment based on sovereign immunity).
${ }^{230}$ Parsa v. State, 64 N.Y.2d 143, 474 N.E.2d 235, 237, 485 N.Y.S.2d 27 (1984) (New York statute required contracts in excess of $\$ 15,000$ to be in writing and approved by the comptroller); Seneca Nursing Home v. Kan. State Bd. of Social Welfare, 490 F.2d 1324, 1332 (10th Cir. 1974) (statute made state immune from liability for implied contracts although a unilateral contract was found to exist).
${ }^{231}$ P.J. Wildner Contracting Co. v. Ohio Turnpike Comm'n, 913 F. Supp. 1031, 1043 (N.D. Ohio 1996); Jensen Constr. Co. v. Dallas County, 920 S.W.2d 761, 774 (Tex. App. 1996); Mountain Pacific Chapter A.G.C. of America v. State of Wash., 10 Wash. App. 406, 518 P.2d 212, 214 (1974).
${ }^{232}$ Concrete Products Co. v. Salt Lake County, 734 P.2d 910, 911 (Utah 1987); Black Lake Pipe Line Co. v. Union Constr. Co., 538 S.W.2d 80, 86 (Tex. 1976); McDonald v. Hayner, 43 Wash. App. 81, 715 P.2d 519, 522 (1986).
${ }^{233}$ Aloe Coal Co. v. Department of Transp., supra note 168, at 767-68.
${ }^{234}$ J.A. Sullivan Corp. v. Commonwealth, supra note 168, at 378-79; 1 Corbin on Contracts § 1.20 (rev. ed. 2001); 26 Williston on Contracts § 68:1 (4th ed. 2003).
${ }^{235}$ United States ex rel. Susi Contracting Co. v. Zara Contracting Co., 146 F.2d 606, 611 (2nd Cir. 1944); Restatement of Contracts § 347-48 (2d).
${ }^{236}$ Acme Process Equip. Co. v. United States, 171 Ct. Cl. 324, 347 F.2d 509, 530 (Ct. Cl. 1965), rev'd. on other grounds, 385 U.S. 138, 87 S. Ct. 350.
${ }^{237}$ Restatement of Contracts § 155 (2d 1979).
for an additional step in a manufacturing process. The court held that neither party bore the burden caused by the mistake, and reasoned that the equitable resolution to the dispute was to reform the contract and split the additional costs equally between the parties. ${ }^{238}$

The doctrine applies only to mutual mistakes about existing facts at the time of contracting. The doctrine does not apply to mistakes about future events,, ${ }^{, 239}$ or to risks that the contractor has assumed. ${ }^{240}$

## c. Failure to Require a Statutorily Mandated Payment Bond

Public property is not subject to mechanics' liens. Subcontractors ${ }^{241}$ on public work projects who are not paid for their work have no lien rights against the public improvement. ${ }^{242}$ The rule is based on public policy. "It requires very little imagination to realize how disruptive the attachment and attempted foreclosure of such liens might be to the orderly operation of state and local government. ${ }^{243}$ Subcontractors who are not paid for their work may not have any recourse against the prime contractor because of the latter's insolvency. The subcontractor's only recourse may be the payment bond and the retainage withheld by the public owner from progress payments. ${ }^{244}$

A public agency may be liable to unpaid subcontractors if it fails to require the prime contractor to obtain a payment bond from a surety. Some public bond statutes impose liability on the agency when it fails to require a bond. ${ }^{245}$ Other bond statutes do not expressly impose liability on the agency for its failure to obtain a bond. ${ }^{246}$ Courts have reached mixed results where a bond statute does not expressly impose liability. Some courts

[^39]have held that a subcontractor had a direct right of action against the agency for its failure to require a bond. ${ }^{247}$ Other courts have found no right of action, declining to create a cause of action where none had been created by statute. ${ }^{248}$

## d. Inapplicability of Tort Law

The remedy for breach of contract is designed to put the nonbreaching party in the same position it would have been in had the breach not occurred. It is designed to protect the intentions of the parties, but it has been held that tort law was designed to protect social policies. ${ }^{249}$ Claims for nonperformance of contractual obligations are based on breach of contract, not tort. ${ }^{250}$

Tort damages are not permitted in a breach of contract action unless the event constituting the breach was accompanied by conduct that amounts to a traditional common law tort. ${ }^{251}$ In the absence of such conduct, courts will generally enforce the breach of a contractual obligation through contract law. ${ }^{252}$ The policies underlying tort and contract remedies were stated by the Virginia Supreme Court. ${ }^{253}$

The controlling policy consideration underlying tort law is the safety of persons and property-the protection of persons and property from losses resulting from injury. The controlling policy consideration underlying the law of contracts is the protection of expectations bargained for. If that distinction is kept in mind, the damages claimed in a particular case may more readily be classified between claims for injuries to persons or property on the one hand and economic losses on the other.
${ }^{247}$ Northwest Steel Co. v. School Dist. No. 16, 76 Or. 321, 148 Pac. 1134, 1135 (1915); City of Atlanta v. United Elec. Co., 202 Ga. App. 239, 414 S.E.2d 251, 253 (1991); Dekalb County v. J.A. Pipeline, 437 S.E.2d 327 (Ga. 1993).
${ }^{248}$ Accent Store Designs, Inc. v. Marathon House, Inc., 647 A.2d 1223 (R.I. 1996); See also Ihr v. City of Duluth, 56 Minn. 182, 59 N.W. 960 (Minn. 1894); Freeman v. City of Chanute, 63 Kan. 573, 66 Pac. 647, 649 (Kan. 1901); ABC Supply Co. v. City of River Rouge, 216 Mich. App. 396, 549 N.W.2d 73, 76 (1996).
${ }^{249}$ Sensebrenner v. Rust et al., 236 Va. 419, 374 S.E.2d 55, 58 (1988); Erlich v. Menezes, 21 Cal. 4th 543, 981 P.2d 978, 982, 87 Cal. Rptr. 2d 886 (Cal. 1999).
${ }^{250}$ State v. Transamerica Premier Ins. Co., 856 P.2d 766, 772 (Alaska 1993).
${ }^{251}$ Erlich v. Menezes, 981 P.2d at 983 (tortious conduct would include fraud, deceit, or an intent to cause severe harm to the non-breaching party). In addition, sovereign immunity, unless waived, would bar tort claims against state agencies.
${ }^{252}$ State v. Trans America Premier Ins. Co., supra note 191; see also, Foreman \& Mills, Inc. v. Belcher Oil Co., 11 Cal. 4th 85, 900 P.2d 669, 682, 44 Cal. Rptr. 420 (Cal. 1995) (Mosk, J., concurring and dissenting).
${ }^{253}$ Sensenbrenner v. Rust et al., 374 S.E. 2 d at 58.

## 6. Claims Against the Owner's Design Professional and the Economic Loss Limitation on Liability

At common law, design professionals (typically architects and engineers) were not liable for the contractor's economic losses caused by defective plans and specifications. Design professionals could be legally responsible for personal injury and physical property damage caused by defective design, but not for economic damage suffered by third parties. ${ }^{254}$ Traditionally, design professionals were retained by project owners. They owed their allegiance to the owners with whom they had contracted, not to the contractors with whom they had no contractual relationship. ${ }^{255}$ The lack of contractual privity as a bar to suits by contractors against design professionals for economic damages begin to erode with the advent of products liability law.

The law imposes upon every person who enters upon an active course of conduct the positive duty to use ordinary care so as to protect others from harm. A violation of that duty is negligence. It is immaterial whether the person acts in his own behalf or under contract with another. ${ }^{* * *}$ We cannot ignore the half century of development in negligence law originating in MacPherson [MacPherson v . Buick Motor Co., 217 N.Y. 382, 111 N.E. 1050 (1916)] and are impelled to conclude that the position and authority of a supervising architect are such that he ought to labor under a duty to the prime contractor to supervise the project with due care under the circumstances, even though his sole contractual relationship is with the owner.... ${ }^{256}$
The rule has evolved in some jurisdictions that a contractor can sue a design professional in negligence for economic loss despite lack of privity between them. ${ }^{257}$ The standard of care owed by the design professional and the failure to meet that standard requires expert testimony, unless the error is so obvious that expert testimony is not necessary. ${ }^{258}$ The same rules apply to construction managers, who, as the name implies, are employed by owners to manage their construction projects. ${ }^{259}$

Under the economic loss rule, design professionals are not liable, either in tort or contract law, for eco-
${ }^{254}$ The term "economic loss" includes increased costs of contract performance and consequent loss of profits. See, Barrett, Jr., Recovery of Economic Loss in Tort for Construction Defects: A Critical Analysis, 40 S.C. L. REV. 891, 892 (1989).
${ }^{255}$ Annotation, Tort Liability of Project Architect for Economic Damages Suffered by Contractor, 65 A.L. R. 3d 249, 252 (1975).
${ }^{256}$ Shoffner Indus. v. W.B. Lloyd Constr. Co., 42 N.C. App. 259, 257 S.E. $2 \mathrm{~d} 50,55$ (1979).
${ }^{257}$ See states listed in Table later in this subpart; see also Restatement of Torts § 552 (2d).
${ }^{258}$ Garaman, Inc. v. Williams, 912 P.2d 1121, 1123 (Wyo. 1996).
${ }^{259}$ James McKinney \& Son, Inc. v. Lake Placid 1980 Olympic Games, Inc., 92 A.D. 2d 991, 461 N.Y.S.2d 483, 486 (A.D. 1983); John E. Green Plumb. \& Heating Co. v. Turner Constr. Co., 500 F. Supp. 910, 912-13 (E.D. Mich. 1980).
nomic losses suffered by contractors with whom they have no contractual privity. ${ }^{260}$ The economic loss rule is based on the policy that a contractor's remedy for economic losses lies in the area of contract law, not tort law. ${ }^{261}$ Courts that follow the economic loss rule often note that the rule provides predictability in allocating risk in the construction industry. ${ }^{262}$ The fee for design services, for example, does not have to include premiums for errors and omissions coverage for economic loss due to construction delays caused by defective plans and specifications. "The fees charged by architects, ...are founded on their expected liability exposure as bargained and provided in the contracts." ${ }^{263}$

A number of jurisdictions have concluded that lack of contractual privity will not bar a tort action by a contractor against a design professional for economic damages. ${ }^{264}$ Other jurisdictions have reached an opposite conclusion, holding that a party cannot sue for economic loss in the absence of privity. The following Table lists many of the states that follow the economic loss rule and many that do not follow that rule.

[^40]| State | Economic Loss Rule Followed | Economic Loss Rule Not Followed | Citation |
| :---: | :---: | :---: | :---: |
| Alabama |  | X | E.C. Ernest Inc. v. Manhattan Const. Co., 531 F.2d 1026 (5th Cir. 1979) (applying Alabama law). |
| Alaska |  | X | Mattingly v. Sheldon Jackson College, 743 P.2d 356, 360 (Ak. 1987). |
| Arizona |  | X | Donnelly Constr. Co. v. Osberg/Hunt/Gilleland, 677 P.2d 1292, 1294 (Ariz. 1984). |
| California |  | X | J'Aire Corp. v. Gregory, 24 Cal. 3d 799, 598 P.2d 60, 64 (1979). See also Dept. of Water and Power v. City of Los Angeles $v . A B B$ Power $T \& D$ Co., 902 F. Supp. 1178, 1188 (1995). |
| Connecticut |  | X | Insurance Co. of N.A. v. Town of Manchester, 17 F. Supp. 2d 81, 85 (D. Conn. 1998) (applying Connecticut Law). |
| Delaware | X |  | Danforth $\quad v . \quad$ Acorn Structures, Inc., 608 A.2d 1194, 1196 (1992). |
| Florida |  | X | Morgansais v. Heathman, 744 So. 2d 973, 978 (Fla. 1999). |
| Hawaii | X |  | City Express Inc. $v$. Express Partners, 959 P.2d 836, 840 (1998). |
| Illinois | X |  | Anderson Elec. Inc. v. Ledbetter Erection Corp., 503 N.E.2d 246, 247 (Ill. 1986). |
| Louisiana |  | X | Gurtler, Hebert \& Co. v. Weyland Mach. Shop Inc., 405 So. 2d 660, 662 (La. App. 1981). |
| Massachusetts | X |  | Priority Finishing Corp. v. LAL Constr. Co., 667 N.E.2d 290 (Mass. App. 1996). |
| Michigan |  | X | Bacco Constr. Co. v. American Colloid Co., 384 N.W.2d 427, 434 (Mich. App. 1986). |
| Minnesota |  | X | Prichard Bros., Inc. v. Grady Co., 428 N.W.2d 391 (Minn. 1988). |


| State | Economic Loss Rule Followed | Economic Loss Rule Not Followed | Citation |
| :---: | :---: | :---: | :---: |
| Mississippi |  | X | City Council of Columbus v. Clark-Dietz \& Associates-Engineers, Inc., 550 F. Supp. 610, 624 (N.D. Miss. 1980) (applying a Mississippi law). |
| Montana |  | X | Jim's Excavating Services v. HKM Assocs., 878 P.2d 248, 254 (Mont. 1994). |
| Nebraska |  | X | John Day Co. v Alvine \& Associates, Inc., 510 N.W.2d 462, 466 (Neb. App. 1993). |
| New Jersey |  | X | New MEA Constr. Corp. v. Harper, 497 A.2d 534, 540 (N.J. Super. 1985). |
| New York |  | Suit allowed if functional privity is established. | Port Auth. of N.Y. v. Rachel Bridge Corp., 597 N.Y.S.2d 35 (A.D. 1993) (functioning privity established); Pile Foundation Constr. Co. v. BergerLehman Assocs., 676 N.Y.S.2d 664 (A.D. 1998). |
| North Carolina |  | X | APAC-Carolina $v$. Greensboro High Point, 431 S.E.2d 508, 517 (N.C. App. 1993). |
| Ohio | X |  | Floor Craft v. Parma Com. Gen. Hosp., 560 N.E.2d 206, 208 (Ohio 1990). |
| Rhode Island | X |  | Forte Bros Inc. v. Nat. Amusements Inc., 525 A.2d, 1301, 1303 (1987). |
| South Carolina | X |  | Cullom Mech. Constr. Inc. v. S.C. Baptist Hospital, 520 S.E.2d 809, 813 (S.C. App. 1999). |
| Tennessee |  | X | John Martin Co. v. Morse/Diesel, Inc., 819 S.W.2d 428, 431 (Tenn. 1991) (adopting Section 552, Restatement (2d)). |
| Utah | X |  | Anderson Towers Owners Ass'n v. CCI Mech., Inc., 930 P.2d 1182, 1189 (Utah 1996). |
| Virginia | X |  | Blake Constr. Co. v. Alley, 353 S.E.2d 724, 726 (Va. 1987). |
| Washington | X |  | Berschauer/Phillips |


| State | Economic Loss Rule <br> Followed | Economic Loss Rule <br> Not Followed | Citation |
| :--- | :--- | :--- | :--- |
|  |  |  | Constr. v. Seattle Sch. <br> Dist., 881 P.2d 986, 990 <br> (Wash. 1994). |
| Wisconsin |  | X | A.E. Inv. Corp. v. Link <br> Builders, 214 N.W.2d <br> $764,768(1974) . ~$ |
| Wyoming |  |  | Rissler \& McMurray <br> Co. v. Sheridan Area Wa- <br> ter Supply Dist., 929 P.2d <br> $1228, ~ 1234-35 ~(W y o . ~$ <br> $1996) . ~$ |

While the economic loss doctrine appears to have developed first at the state level, the U.S. Supreme Court recognized the doctrine in a 1986 decision, East River Steamship Corp. v. Transamerica Delaval, Inc. ${ }^{265}$ In states whose courts have adopted it, the economic loss doctrine prohibits unintentional tort actions against professional or commercial defendants in which the plaintiff seeks to recover purely economic losses for the consequences of a negligent act in order to protect such defendants from unlimited liability and thereby keep the risk of liability reasonably calculable. The doctrine typically comes to bear in complex situations involving multiple contracting parties, not necessarily all in contractual privity with each other, and seeks to resolve responsibility for the consequences of negligent design through the principles of contract law rather than tort law, under which the calculation of damages might be much greater. Some analysts have suggested that contract law may, in effect, be preempting tort law in certain fields. Some have also suggested that this is explained by a rising preference for private ordering over public regulation. In determining whether to apply this doctrine, a court determines first whether the damages sought are purely economic in nature and then whether the economic loss doctrine applies to the type of claim involved. Even in some states that apply the doctrine, there may be certain exceptions, including claims for negligent misrepresentation.

In a 2010 case, Hunt Constr. Group, Inc. v. Brennan Beer Gorman Architects, P.C. et al., the U.S. Court of Appeals for the Second Circuit referred to the Vermont Supreme Court the questions of whether, under Vermont law, the economic loss doctrine barred contractors from seeking purely economic damages from design professionals for breach of contract and if so whether that doctrine applied to the specific claim involved in the case. ${ }^{266}$ The District Court had dismissed a contractor's case against a design professional retained by a property owner, involving

[^41]late delivery of plans for a hotel construction project, on the grounds that Vermont had adopted the economic loss doctrine. The contractor appealed, asserting that its claims fell under exceptions for special relationships and for negligent misrepresentation. Reviewing Vermont case law, the Second Circuit found that the issues raised on appeal had not yet been resolved by Vermont courts and that these involved purely state law issues, would control the outcome of the case, lacked controlling precedent, and involved important issues. Accordingly, the Second Circuit referred the issues involving the economic loss doctrine to the Vermont Supreme Court for determination.

In a 2011 decision, $R \& O$ Construction Co. v. Rox Pro et al., the U.S. District Court for the District of Nevada dismissed a contractor's actions against a design professional arising from a construction defect case. ${ }^{267}$ While not a highway case, this was nonetheless of interest for its treatment of the economic loss doctrine. In that case, an architectural firm had been retained by the owner of a store chain to design stores, and a contractor had been hired by the owner to build a particular store. After a stone veneer installation failed during construction, requiring expensive repairs, the contractor sued both subcontractors and the design professionals, alleging negligent misrepresentation and breach of contract by the design professionals. The court granted the design firm's motion for summary judgment, ruling that the alleged negligent misrepresentation on the grounds was really a claim for professional negligence and as such was barred by the economic loss doctrine, which Nevada courts considered to bar malpractice claims against design professionals involved in commercial property development or improvement. The court also denied the contractor's breach of contract claim against the design professional, rejecting an argument that the contractor was an intended third party beneficiary to the design contract between the owner and the design professional.

In a 2010 decision, Ohio County Devel. Auth. et ano. v. Pederson \& Pederson, Inc., the U.S. District Court for the Northern District of West Virginia addressed the
${ }^{267} 2011$ U.S. Dist. LEXIS 131633 (U.S. Dist. Ct. D. Nev., Nov. 14, 2011).
impact of the economic loss doctrine on the liability of design professionals in the context of an economic development project severely damaged by inadequate geotechnical and foundation design work. ${ }^{268}$ The case involved a commercial distribution center built for a municipal development authority and leased to a commercial firm. The facility was built in a mountainous area on a dirt pad. The concrete began cracking after completion of construction due to inadequate construction of the dirt pad. After litigation commenced, a geotechnical subcontractor moved to dismiss a negligent design claim based on the economic loss doctrine. The court denied the defendant's motion to dismiss due to a lack of sufficient evidence on whether any special relationship existed that would establish an exception to the economic loss doctrine under West Virginia law. The court indicated that the existence of such a relationship would be determined largely by the extent to which the particular plaintiff was affected differently from society in general. The court also denied a motion to dismiss a breach of contract count denied, because there was insufficient evidence regarding whether the contract between the contractor and the geotechnical subcontractor was intended to benefit the owner of the facility. The court further denied a motion to dismiss an implied warranty claim on the basis that West Virginia courts rejected a lack of privity as a defense to such claims. The court granted a motion to dismiss a cross-claim for express indemnification without prejudice to refile an adequately drafted cross-claim. Finally, the court denied a motion to dismiss a cross-claim for implied indemnification and contribution.

In a 2009 case, Federal Insurance Co. v. General Electric Co., the U.S. District Court for the Southern District of Mississippi addressed the economic loss doctrine but in a case arising from Hurricane Katrina and straddling the line between facility design liability issues and products liability cases. ${ }^{269}$ A hospital had leased an MRI machine from General Electric (GE). A GE subsidiary had maintenance responsibilities and entered into a renovation contract with the hospital. Proper installation of the MRI machine required a special cryogenic vent system, which needed to operate continually on a on $24 / 7$ basis. This system involved the use of liquid helium to cool a superconducting magnet and required a vent to relieve pressure in case the power failed and liquid helium vaporized and increased pressure in the system. The hospital was in the area affected by Hurricane Katrina, lost power, and had limited generators but no dedicated backup power source to keep the vent system operating and the MRI cooled. The helium in the cooling system vaporized, damaging the MRI's superconducting magnet, and

[^42]efforts to refill the cooling system were thwarted by a leak somewhere in the ventilation system. The hospital ultimately replaced the damaged MRI machine with a new one at a cost of more than $\$ 1.3$ million. The hospital's insurance company claimed that this was because the vent system had been inadequately designed and that GE should have known that. The insurance company brought various tort and contract claims, including negligent design of the MRI vent system, negligent failure to warn of the known risk of damage to the MRI's magnet if the vent system was obstructed, negligent failure to properly service and maintain the MRI by failing to take action when electric power was lost, breach of the service and support agreement, and breach of implied warranties provided by Mississippi law. Among multiple legal arguments for dismissal of the insurance company's claims, GE argued that the tort claims were barred under the economic loss doctrine. The court noted that the economic loss doctrine applied in product liability cases but had not been extended beyond product liability cases to apply to this case involving a duty shaped by a contract.

## C. CONTRACTORS' CLAIMS—DAMAGES

## 1. Introduction

After entitlement is established, the contractor must prove damages. ${ }^{270}$ Generally speaking, damages for breach and an equitable adjustment under the contract are measured in the same way. The general measure of damages for breach of contract is to put the nondefaulting party in as good a position, pecuniarily, as it would have been if the breach had not occurred. ${ }^{271}$ Similarly, an equitable adjustment is designed to keep a contractor whole when the government modifies the contract. ${ }^{272}$ The operative word is "equitable." The adjustment in the contract price should not give either party an advantage that it would not have had had there been no change. The measure of an equitable adjustment is "the difference between what it would have reasonably cost to perform the work as originally required and what it would reasonably cost to perform the work as changed.'" ${ }^{273}$ A contractor who has underestimated his bid or incurred unanticipated costs may not use a

[^43]change order as an excuse or opportunity to shift its own losses or risks to the owner. ${ }^{274}$

The kinds of damages sought by a contractor may vary. They may include the cost of added labor, additional equipment costs, unabsorbed home office overhead expense, and delay and impact costs. These costs may be presented in different ways. They may be based on actual costs or estimates. They may be priced as discrete claim items, or they may be based on an approximation, using a jury verdict approach. ${ }^{275}$ This subsection discusses the types of damages and costs that a contractor may seek, and the traditional methods that may be used to prove damages.

## 2. Contract Clauses Limiting Recovery

The amount of an equitable adjustment may be limited by the specific provisions of the contract. The DSC clause used by most states is one example. That clause does not allow additional compensation for any effects of the condition on unchanged work. ${ }^{276}$ Another example is the suspension of work clause, which does not allow profit on delay costs. ${ }^{277}$ Generally, clauses imposing limits on the amount that can be recovered under the contract are enforceable. ${ }^{278}$

A contractor may attempt to avoid the effect of those kinds of limiting clauses by claiming damages based on breach of contract. Whether such efforts are successful depends upon whether the contractor can prove that the changes were so substantial that they were beyond the general scope of the work specified in the contract. Changes of that magnitude may be a breach of contract. ${ }^{279}$ If the change is within the general scope of the contract, the limitations on recovery apply. ${ }^{280}$ The question of whether the change is within the general scope of the contract may be a question of fact,,${ }^{281}$ of law, ${ }^{282}$ or a mixed question of fact and law. ${ }^{283}$

[^44]Most construction contracts contain clauses that limit an owner's exposure for damages for breach of contract. No-damage-for-delay clauses are a common example of this type of clause. ${ }^{284}$ Another example is clauses excluding liability for consequential damages. ${ }^{285}$ A contracting party may validly waive its remedies for breach of contract by assenting to a clause limiting damages for breach of contract. Such clauses are enforceable unless they violate some specific public policy defined in a statute or legal precedent. ${ }^{286}$

In addition, some state transportation agencies do not permit contract ltitigation until after the contract work is completed. Florida standard contract provisions provide that no circuit court or arbitration proceeding on any claim or part thereof may be filed until after acceptance of all contract work or denial, whichever occurs last. New York State administrative practice moves to dismiss all filed claims until the contract work is completed and closed out. Permitting litigation can create significant obstacles to project completion. Engineers should not be forced to devote their time to attending depositions or preparing claim defenses to complex construction litigation while the project is still under construction, but should be directing their engineering efforts to completing the project. On the other hand, permitting construction litigation before project completion enhances real-time issue analysis and realtime dispute resolution, as compared with delaying litigation until after project completion, which may serve to dim memories and recollection as to what happened during the time of contract performance. Ohio DOT does permit contract claim litigation before project completion, and it has at times focused attention away from project-completion efforts, which may cause problems, especially in times of reduced state manpower.

## 3. Damage Principles

Certain principles apply in determining damages. The most basic principle is the purpose for awarding damages. Damages are awarded by courts, boards, and arbitrators in an attempt to put the nonbreaching party in the same position that it would have occupied had the breach not occurred. ${ }^{287}$ Another principle is that damages will not be awarded based on speculation or conjecture. ${ }^{288}$ But damages need not be proven with exact certainty, if the claimant clearly proves that it

[^45]has suffered damages caused by the defaulting party. ${ }^{289}$ It is sufficient if the evidence allows a judge or jury to make a reasonable approximation of the amount of damages without resorting to conjecture or speculation. ${ }^{290}$ However, leniency in allowing an approximation of the amount of damages does not relieve the contractor of its burden of proving liability, causation, and resultant injury. ${ }^{291}$

A party seeking damages for breach of contract has a duty to take reasonable steps to avoid or mitigate losses resulting from the breach. ${ }^{292}$ The burden of proving that the claimant failed to mitigate damages rests with the nondefaulting party. ${ }^{293}$ The party seeking damages must also show that the costs claimed are reasonable and were caused by the event or default on which the claim is based. ${ }^{294}$ Under federal construction law, prior to 1987, a contractor's actual costs were presumed reasonable. The Government had the burden of proving that the contractor's actual costs were unreasonable. ${ }^{295}$ In 1987, there was an amendment to the FAR eliminating that presumption and shifting the burden from the Government to the contractor to show that its actual costs were reasonable. ${ }^{296}$ The presumption that a contractor's actual costs are reasonable may also be negated by evidentiary rules. ${ }^{297}$ This is consistent with the general rule that the burden is on the contractor to prove that its claimed costs are reasonable. 298

Quantum meruit is a term that relates to how damages are measured; it is not a theory of recovery although it may be used to avoid unjust enrichment. ${ }^{299}$ Literally, it means, "As much as he has deserved." ${ }^{300}$ It is used to measure damages where extra work was per-

[^46]formed that was not covered by the contract, ${ }^{301}$ or where work was performed and accepted without the presence of an authorized contract. ${ }^{302}$ The value of the benefit conformed is usually measured by the actual reasonable costs incurred by the contractor in performing the work, plus markup for overhead and profit. ${ }^{303}$

Quantum meruit recovery is not allowed where the work is covered by a specific contractual remedy, ${ }^{304}$ or where the circumstances are such that the contractor could not reasonably expect to be paid for the work. ${ }^{305}$

## 4. Methods of Calculating Damages

There is no single method for calculating damages. If the contract does not establish a method for calculating damages, the contractor may try to prove damages using various methods. This subpart discusses the traditional methods that may be used to prove damages resulting from changes or delays caused by the owner.

## a. Discrete Cost Method

The discrete cost method calculates the increased costs of changes or delays to the work on an item-byitem basis. The actual costs incurred because of changes or delays are segregated, assigned to each item, and documented in the contractor's cost accounting records. ${ }^{306}$ This method is preferred by the courts because it is considered to be the best evidence of actual damages. ${ }^{307}$

Estimated costs may be permitted if actual costs are unavailable, and the contractor has a valid reason for not having actual cost information. But the claim may be denied if the contractor could easily have kept records of its actual costs caused by owner action or fault,

[^47]but did not, and has no valid excuse for not keeping records. ${ }^{308}$

The discrete method of calculating damages for breach of contract or an equitable adjustment under a remedy granting clause provides the owner with documented, actual costs tied directly to items of work that have been changed or delayed.

## b. Total Cost Method

Under the total cost method, the contractor recovers the difference between the total cost of performing the work and the bid price, plus a reasonable profit. ${ }^{309}$ This method is disfavored by the courts and can only be used where there is no other means of determining damages. ${ }^{310}$ It is disfavored because it suffers from the following defects. First, it presumes that the bid was reasonable. If the bid is unreasonably low, the difference between the contractor's total costs to perform the contract and its bid is increased, thereby increasing the contractor's damages solely by underbidding the project and not by incurring additional costs caused by the owner. ${ }^{311}$ Second, this method assumes that the owner, not the contractor, is responsible for all of the increased costs. This defect further assumes that the contractor was not responsible for any increase in the cost of the work, passing along to the owner increased costs that may have resulted from the contractor's inefficiency, or from events for which the owner was not responsible. ${ }^{312}$

While courts disfavor the total cost method, they do not prohibit its use. Its use is based on the principle that, "Where a contractor is entitled to an adjustment, the contracting entity should not be relieved of its liability for the same merely because the contractor is unable to prove its increased costs within a mathematical certainty." ${ }^{313}$ Essentially, the courts will allow this method to be used if there is no better method for proving damages, and the following safeguards can be established:

[^48]- The bid was reasonable and properly prepared. This may be determined by comparing the bids submitted by the other bidders with the contractor's bid. ${ }^{314}$
- The total costs expended were reasonable. ${ }^{315}$
- The contractor is not responsible for the additional costs. ${ }^{316}$

These safeguards or prerequisites to the use of this method must be proved by a preponderance of the evidence. ${ }^{317}$ Failure to prove them requires that the total cost claim be dismissed. ${ }^{318}$ If a jury is allowed to hear evidence of damages calculated on a total cost method, the jury must be instructed by the court not to allow damages based on total costs unless these safeguards are established. ${ }^{319}$ The owner should consider presenting evidence challenging the contractor's total cost figures rather than counting on the jury, or a judge in a bench trial, to deny the claim in its entirety because the contractor failed to establish the foundational prerequisites for use of the total cost method. ${ }^{320}$

The total cost method is a simple way of calculating damages. Essentially, it converts a fixed-price contract into a cost-plus contract. This method assumes that the bid for performing the work was reasonable and accurately computed. It assumes the contractor's increased costs were reasonable and that the owner, not the contractor, or factors for which the owner was not reasonable, caused the costs to increase. It is disfavored as a matter of law because it piles assumption upon assumption, and as such becomes speculative. The assertion that it is too difficult to segregate impact and delay costs and allocate them to specific work items is not enough to justify the total cost method. The contractor

[^49]should be required to prove that its accounting system and its use of cost codes do not permit allocation of specific costs to discrete events, where the effects of impacts and disruptions on unchanged work are so intertwined that allocation of those costs are highly impracticable. ${ }^{321}$

New York allows the use of total cost basis for calculation of damges. The total cost basis is allowed even though the contractor may be responsible for some of the damages incurred. The courts in determing liability often allocate a percentage of the total cost damages to the State. ${ }^{322}$ The court in Felhaber Corp. \& Horm Construction Co. v. State, held that where the contractor asserted its actual costs, together with its allowances for overhead and profit without regard to its bid, the total cost theory of damages was sanctioned. ${ }^{323}$ Total cost calculations based on the total cost less the amount paid for specific bid items are also an acceptable damage theory in New York.

## c. Modified Total Cost Method

The modified total cost method is simply the total method adjusted to satisfy two of the prerequisites for the use of the total cost method. ${ }^{324}$ Under the modified total cost approach, deductions are actually made for costs attributable to the contractor, ${ }^{325}$ and for underbidding where the evidence indicates that the contractor's bid was too low. ${ }^{326}$ This approach is designed to eliminate two of the deficiencies inherent in the total cost method: the assumption that the bid was realistic and the assumption that all of the excess costs were the responsibility of the owner. ${ }^{327}$

The problem with this approach is that it shifts the burden of proof. It is a fundamental rule of law that a claimant has the burden of proving its damages. ${ }^{328}$ In contrast with the discrete method of proving damages, a contractor using the modified total method can, if it chooses, allocate some of its increased costs to obvious self-inflicted wounds, leaving it to the owner to prove

[^50]that there are other costs that should also be the contractor's responsibility. ${ }^{329}$ The following factors should be considered in defending claims based on a total or modified total cost method. ${ }^{330}$

- The contractor's bid work-up sheets should be examined to determine how the contractor put the bid together. The examination should be made to determine whether the contractor bid too low on some aspects of the work or made assumptions in bidding that were unrealistic or unfounded. The analysis may also consider whether the bid was unbalanced with respect to items that seriously overran or underran.
- Nonimpacted items of work should be compared with similar impacted items of work. This is referred to as the "measured mile" analysis.
- Financial records obtained through an audit should be analyzed by experts.
- An engineering and schedule analysis should be performed to identify concurrent delays. ${ }^{331}$

This type of analysis allows the owner to determine when the contractor is attempting to obtain additional compensation for mistakes that the contractor made in its bid and during contract performance. Considerable lay and expert testimony may be required to prove these factors and may likewise be rebutted by similar evidence presented by the contractor. This type of analysis is also of major import, because the total or modified total cost methods will not be permitted if the prerequisites to their use are not established by the contractor, ${ }^{332}$ or at least one of the prerequisites to their use are disproved by the owner. ${ }^{333}$

## d. Jury Verdict

The "jury verdict" method is used by courts to determine (much like a jury would) a fair and reasonable amount that should be awarded as an equitable adjustment, or as damages for breach of contract. It is used by courts to reconcile conflicting testimony, and not as a method of proving damages. ${ }^{334}$ The prerequisites for using this method are: (1) clear proof that the contractor is entitled to damages for breach of contract or an equitable adjustment; (2) sufficient evidence to

[^51]allow the court to make a reasonable estimation as to the amount of damages; and (3) proof that there was no more reliable method of computing damages. ${ }^{335}$ The jury verdict method may not be used, and the claim may be dismissed, where the contractor could have kept records of its actual increased costs, but did not, and has no justifiable excuse for not doing so. ${ }^{336}$

## e. Force Account

Specifications used by state transportation agencies in their construction contracts usually contain force account provisions. ${ }^{337}$ Force account provisions allow the agency to pay for contract changes on a time and material basis when the contractor and the agency cannot agree on a price for the change. ${ }^{338}$ Occasionally, force account has been used by contractors to price equipment for large claims. This occurs when the specifications provide that the price adjustment for a change, a DSC, or a contract termination for convenience will be determined by agreement of the parties, or if they cannot agree, by force account. This type of pricing can result in a real advantage to a contractor by using rates from a manual to price its equipment rather than its actual equipment costs. ${ }^{339}$ Generally, force account should not be used to price large claims. To prevent this, the contract should provide that no claim for force account shall be allowed unless ordered in writing by the engineer prior to the performance of the work.

## 5. Cost Categories

Aside from miscellaneous and subcontractor expenses, a contractor's cost in performing work may be grouped into four general categories: labor, materials, equipment, and overhead. These costs can be further classified as either direct or indirect. Direct costs are those tied to a specific construction activity, while indirect costs that cannot be tied to specific work items are treated as part of overhead.

Most contractors keep detailed cost records for their projects. This allows them to account for the cost of labor, materials, and equipment used for a particular construction activity. When new or extra work is undertaken, a cost code can be established for that activity. However, the determination of extra labor hours resulting from labor inefficiency may be impossible to identify

[^52]and segregate from the man-hours expended to perform the original contract work. ${ }^{340}$

## a. Increased Labor Costs and Loss of Productivity

Direct labor costs consist of the base wages and fringe benefits that are paid to personnel who perform a specific segment of construction. The wages of an ironworker, for example, can be determined from payroll records and allocated to steel erection work. Accounting for added labor costs caused by extra work is easy if those costs are clearly allocated to a new cost code established for that purpose. Where the difficulty occurs is when the original contract work is impacted by the contract change, reducing the efficiency or productivity of the contractor's labor force. This may be due to delay causing work to be performed during adverse weather, or causing work to be performed out of sequence, or from trade stacking and over-manning to meet an accelerated completion schedule.

## Loss of productivity

Loss of productivity claims are frequently part of today's contractor claim submission. Contractors assert that their labor has sustained loss of productivity occasioned by the owner's actions or inactions. Although some state transportation contracts list loss of efficiency claims as not compensable, ${ }^{341}$ this has not stopped contractors from seeking to pursue them anyway. Some causes of inefficient operation include excessive number of mobilizations or demobilizations, restricted access, excessive inspections, large number of change orders, delays in shop-drawing approvals, working around utilities, winter work, working overtime or extended hours, or acceleration, all of which can affect labor productivity. Loss of productivity claims are also asscociated with cumulative impact claims or "ripple effect" caused by excessive number of change orders that can affect labor productivity. In Luria Brothers \& Company Inc. v. United States, ${ }^{342}$ the Court of Claims recognized the loss of productivity theory of damages in an airport project, caused by uprooting foundations for further subsoil investigation and specification changes made by the owner.

Because contractors rarely maintain cost records that precisely segregate inefficiency costs, such inefficiency may require expert analysis.

The most widely accepted and credible method of measurement is known as the "measured mile" method. The measured mile method compares the productivity on identical activities during the impacted and unimpacted periods of time of the project to determine the loss of productivity resulting from the impact; however, it is often difficult, if not impossible, to find areas where

[^53]the work is identical and is being performed under identical conditions except for the impact factors. Quantities of work, weather, work area, and other factors may affect the validity of the measured mile calculation, resulting in an analysis of substantially similar, rather than identical, activities. ${ }^{343}$

The measured mile analysis has been successfully used in Natkin \& Co. v. George A. Fuller Co. In Natkin, the delay in performance was caused by the owner's delay in furnishing equipment, drawings, and engineering information for the project. Natkin provided a measured mile analysis comparing installation of the pipe during the unimpacted period at the start of the job with the man hours expended during the impacted period. Natkin's claim for loss of productivity was based on the difference in man hours in the two periods. The court found that comparing the unit costs during the impacted and unimpacted period was reasonable and awarded loss of productivity damages. ${ }^{344}$

In Appeals of W.G. Yates \& Sons Construction, ${ }^{345}$ the board approved the use of measured mile analysis comparing the cost of performing work during periods both affected and unaffected by disputed events. The board accepted the contractors' use of this methodology as an acceptable vehicle for determining labor inefficiencies costs due to the government's defective specification.

The measured mile analysis has been accepted by courts and boards. It also requires a causal connection to actions or inactions of the party against whom the claim is being asserted. ${ }^{346}$ Cost or production data or productivity data can also be used in the measured mile analysis. In State ex rel Department of Transportation v. Guy F. Atkinson Co., ${ }^{347}$ the court affimed an arbitration award of $\$ 1,130,000$ for 65 percent of the claimed cumulative impact damages caused by piecemeal changes ordered by the state engineer that impacted the entire project. Essential elements of cumulative impact claims include extensive changes that fundamentally alter the contract; the contractor's ability to demonstrate a causal link between the changes and the inefficiency, and the contractor's ability to substantiate a reasonable estimate using project records or industry studies. ${ }^{348}$

[^54]Other theories, based on manuals, which include the Mechanical Contractors Estimating Manual and the National Electrical Association Job Factors, have also been used, but are not as uniformly accepted as the measured mile analysis.

Another method is to estimate an inefficiency percentage and apply that percentage to labor costs. For instance, in one case, the court allowed a 10 percent increase for labor inefficiency caused by work being performed out-of-sequence. ${ }^{349}$ An analysis of this kind requires expert testimony, ${ }^{350}$ and may rely on industry studies. ${ }^{351}$ However, a comparison of actual labor costs to the amount estimated in the original bid has been rejected. The court said that this approach has the same shortcomings inherent in the total cost method: the labor estimate may be too low and the cost overrun may be due, at least in part, to problems that are not the owner's fault. ${ }^{352}$ Inefficient labor claims are frequently found in acceleration claims. ${ }^{353}$ Excessive overtime can affect work output and lower efficiency through physical fatigue. Stacking of trades within limited work areas causes congestion, affecting efficiency. There are also indirect labor costs. Field supervision costs may be increased when a delay or a change extends the project. Field supervisions costs for extended project durations should be documented as to the additional time spent on the project, rather than using an inefficiency factor as a markup on the total supervisory costs. A contractor may also recover premium pay for overtime work and for second and third shift work, where work is accelerated due to owner-caused delay. There is no recovery, however, where premium time was not due to an owner-caused breach. ${ }^{354}$ But wage

[^55]increases for work performed in a later time period than planned, due to owner delay, may be recovered. ${ }^{355}$

## b. Increased Cost of Materials

An increase in the cost of materials due to ownercaused delay is compensable. The claim should not include shipping charges, since the contractor would bear those costs irrespective of when the materials were delivered, unless the shipping costs also increased.

Some contracts include an escalation clause allowing a price adjustment for certain products that increase in price during contract performance. Petroleum products are an example of materials where the price may rise suddenly. ${ }^{356}$

Many state transportation construction contract provisions contain price escalation or price adjustment provisions. Historically, price adjustment provisions were developed in reponse to the Organization of Petroleum Exporting Countries (OPEC) oil embargo of 1973. The provisions establish a method for unit contract price adjustment resulting from certain economic conditons. Previous examples include adjustment provisions when asphalt, fuel, and cement were in nationally short supply. These provisions reduce the contractor's risk by allocating the risk to the public owner so as to reduce inflated bid prices and overall project costs. Federal guidance suggests that adjustment standards should be based on and contain a base index, which is not susceptible to manipulation by contractors or suppliers. The state transportation agency may develop its own price index or adopt published and commonly available data such as the Consumer Price Index. ${ }^{357}$ Federal requirements note that they have no legal authority to participate in retroactive modifications related to material price increases, so state DOTs may have to absorb such cost increases exclusively from state funding. Today's state provisions include adjustment provisions for steel, cement, asphalt, and fuel.

## c. Increased Equipment Costs

Most contracts establish how equipment should be priced and refer to equipment costing guide manuals. ${ }^{358}$ These manuals are published by a number of organizations. ${ }^{359}$ In general, equipment costs are broken down

[^56] Curriculum Manual 18 (hereinafter CACC Manual), 2001, available at http://www.fhwa.dot.gov/programadmin/contracts/ cacc.pdf, last accessed on June 27, 2012.
${ }^{358}$ Quality Asphalt Paring, Inc. v. State of Alaska, Dep’t of Transp. \& Public Facilities, 71 P.3d 865, 873-74 (Alaska 2003).
${ }^{359}$ Rental Rate Blue Book for Construction Equipment. Rates can be weekly or monthly. The latter has lower rates than the former. Rental Rates Compilation, Associated Equipment Distributors; Construction Equipment Ownership and Operating Expense Schedule, U.S. Army Corps of Engineers; Contractor's Equipment Cost Guide, The Associated General
into two categories: rented and owned. Payment for rented equipment is based on paid invoices. When equipment is rented from rental companies or other contractors, the amount paid will be allowed, if it is reasonable and the rental was an arms-length transaction. However, in federal procurement where the equipment is rented from a division, subsidiary, or organization under the common control of the contractor, the allowability of the rental charges is determined by regulation. ${ }^{360}$ In addition, under federal regulations, certain costs, such as maintenance and minor repairs necessary to keep the equipment operational, may be allowed. ${ }^{361}$

The contract specifications may control the costs allowed for owned equipment. For example, recovery for owned equipment may be limited to rates established by an equipment rental agreement with the AGC, or the contractor's actual ownership and operating costs, whichever is less. ${ }^{362}$ Some contractors who own equipment do not keep sufficient records to establish their actual equipment costs. ${ }^{363}$ In the absence of a regulation or directive that allows or requires the use of published rates, contractors must prove that their records are inadequate to establish their actual ownership rates before they can use published rates. ${ }^{364}$ When the actual cost of equipment ownership can be determined, those costs must be used. ${ }^{365}$

Contractors are generally entitled to compensation to cover their equipment costs during a period where work is suspended or delayed. ${ }^{366}$ Recovery for idle equipment is denied, however, where the contractor could have used the equipment elsewhere. ${ }^{367}$ This is consistent with the contractor's common law duty to mitigate its damages. ${ }^{368}$ Standby rates for idle equipment are usually priced at actual ownership rates or 50

Contractors; Labor Surcharge and Equipment Rental Rates, The California Dep't of Transportation; Tool and Equipment Rental Schedule, National Electrical Contractor's Association.
${ }^{360} 48$ C.F.R. ch. 1 §§ $31.105(\mathrm{~d})(2)(\mathrm{c}) ; 31.205 .36(\mathrm{~b})(3)$.
${ }^{361} 48$ C.F.R. § $31.105(\mathrm{~d})(2)(\mathrm{c})(\mathrm{ii)}(\mathrm{~A})$.
${ }^{362}$ For example, Colorado specifies the Dataquest Blue Book for establishing equipment rental. The hourly rental rate is based on the Blue Book Monthly Rate published by Dataquest times a rate adjustment factor times the regional adjustment average divided by 176 (working hours in a month). Colorado Standard Specifications § 109.04(c) (1999).
${ }^{363}$ These costs include: equipment depreciation, taxes and insurance, capital investment, i.e., return on money spent on equipment.
${ }^{364}$ Meva Corp. v. United States, 206 Ct. Cl. 203, 511 F.2d 548, 559 (Ct. Cl. 1975), Nolan Bros. v. United States, 194 Ct. Cl. 1, 437 F.2d 1371, 1379-80 (Ct. Cl. 1971) (regulations allowed use of published notes).
${ }^{365}$ Meva Corp., id.
${ }^{366}$ Zook Bros. Constr. Co. v. State, 171 Mont. 64, 556 P.2d 911, 917 (1976); Peter Salucci \& Sons, Inc. v. State, 110 N.H. 136, 268 A.2d 899, 910 (1970).
${ }^{367}$ Excavation-Constr., Inc., ENG BCA No. 3858, 82-1 BCA II 15,770, at 78, 058 (1982).
${ }^{368}$ See Subpart 3, supra.
percent of equipment manual rates. ${ }^{369}$ The standby reduction reflects the cost of owning the equipment, but not the wear and tear on the equipment and "FOG" (fuel, oil, and grease costs), since the equipment is not operating during the suspension or delay period.

## d. Home Office Overhead

Home office overhead represents those costs necessary to conduct business. It includes salaries, rent, depreciation, taxes, insurance, utilities, office equipment, data processing costs, legal and accounting expenses, office supplies, and other miscellaneous general and administrative expenses. ${ }^{370}$ Because of their nature, these expenses are indirect and cannot be directly traced to any particular contract. ${ }^{371}$

When a contract is delayed, home office expenses may accrue beyond the amount allocated by the contractor in its bid. Since there is little or no work, there is little or no income from contract progress payments to absorb those costs. ${ }^{372}$ Those costs become "unabsorbed. ${ }^{373}$ Thus, contractors who have incurred unabsorbed or extended home office expenses during a period of owner-caused delay have been permitted to recover those costs as part of their damages for compensable delay. ${ }^{374}$ The costs are compensable because they were incurred due to owner- caused delay, but not reimbursed as part of the contract price. ${ }^{375}$

Some state transportation contract provisions, ranging from NYSDOT's use of a fixed overhead percentage to cover main office overhead, ${ }^{376}$ to Caltrans requirements that mandate contractors on certain projects to provide in their bid daily overhead amounts, which are later used for contract adjustments.
i. The Eichleay Formula.-The Eichleay formula is a method of approximating home office overhead expenses caused by delay. It computes home office overhead expenses on the basis of a pro rata amount per day and then multiplies that amount times the number of days that the project was delayed. The result is the
${ }^{369}$ L. L. Hall Contr. Co. v. United States, 177 Ct. Cl. 870, 379 F.2d 559, 568 (1967); Zook Bros. Constr. Co. v. State, 556 F.2d at 917 (standby rate was 50 percent of hourly rate established by the Montana State Highway Dep't).
${ }^{370}$ Contractors include some amount in their bids to cover home office expenses incurred during the duration of the contract. Aetna Casualty \& Sur. v. Chapel Hill Indep. Sch. Dist., 860 S.W.2d 67,672 (Tex. 1993).
${ }^{371}$ Wickham Contracting Co. v. Fischer, 12 F.3d 1574, 1578 (Fed. Cir. 1994).
${ }^{372}$ West v. All State Boiler, Inc., 146 F.3d 1368, 1372 (Fed. Cir. 1998).
${ }^{373}$ In Eichleay Corp., ASBCA No. 5183, 60-2 BCA II 2688 (1960).
${ }^{374}$ Id.
${ }^{375}$ Wickham Contracting Co. v. Fischer, 12 F.3d at 1577.
${ }^{376}$ NYSDOT Standard Specifications § 109-05(d)(1)(e) and (g).
amount of home office overhead damages. ${ }^{377}$ Its use as a method of calculating home office overhead damages for federal construction contracts spans over 40 years. ${ }^{378}$ The basic formula consists of the following steps:

[^57]STEP 1 Delayed contract billings Total billings during contract period.

Total home office overhead in- Overhead allocable to the contract.
X curred during contract period.
$=$ Overhead per day allocable to delayed contract.

X Number of days of delay. $\quad=\quad$ Unabsorbed overhead damages.

The formula has undergone certain modifications. For example, it is important that the actual period of contract performance be used, not the number of days planned or scheduled for contract performance. Because the formula attempts to determine the amount of overhead attributable to the actual period of performance of the delayed contract, the per diem rate is necessarily obtained by dividing this figure by the number of days of actual performance. Dividing by the number of days of the original contract period distorts the formula. ${ }^{379}$

Another modification is that the actual delay beyond the scheduled completion date must be used, not the suspension period. The Federal Circuit has stated, "We clarify that it is the delay at the end of performance resulting from the suspension that results in unabsorbed overhead expenses which a contractor may recover under Eichleay."380

To use Eichleay, the contractor must also show that it was on standby and that it was unable to take on replacement work during the suspension: work that provides the "same amount of money for the same period toward overhead costs as the government contract." ${ }^{381}$ The standby test requires that the contractor remain ready to perform and that it was impractical for the contractor to obtain other work to which it could reallocate its home office overhead expenses. ${ }^{382}$ In addi-

[^58]tion, Eichleay should not apply where the original contract duration is extended by change order work, when the added work provides sufficient income to absorb the contractor's proportionate share of home office expenses. ${ }^{383}$

One state has rejected the Eichleay formula as too speculative, ${ }^{384}$ while other states have permitted its use in calculating delay damages. ${ }^{385}$ Eichleay has been criticized for allowing damages without first determining whether additional overhead costs were actually incurred. It may also include damages for construction shut-down periods, such as weather or other non-owner-caused events, when the contractor would normally be idle. The formula also assumes that the daily overhead cost is a fixed cost, when in fact the costs are an approximation based on costs that are variable. ${ }^{386}$

[^59]Another criticism is that the daily rate of overhead expense may be disproportionate when there is a small amount of work remaining. In Berley Industries v. City of New York, the court said; "The damages computed under the Eichleay formula would be the same in this case whether the plaintiff had completed only $1 \%$ or $99 \%$ of the job on the scheduled completion date of May 7, 1971." ${ }^{387}$ But despite criticism, acceptance of the Eichleay formula seems to be growing. ${ }^{388}$
ii. Other Methods of Determining Home Office Overhead Expenses.-Methods other than the Eichleay formula may be used to calculate home office overhead expenses. Using a contractor's usual markup rate in preparing bids is one such method for determining home office costs during an extended contract period. Under this method, the direct cost incurred during the extended period is multiplied by the percentage markup. The result is the home office overhead damages for the extended contract. ${ }^{389}$ A similar method is the use of a fixed markup rate specified in the contract. For example, the FDOT has a standard clause that contains the following formula: ${ }^{390}$

$$
\mathrm{D}=\frac{\mathrm{A} \times \mathrm{C}}{\mathrm{~B}}
$$

$$
\text { Where: } \begin{aligned}
A & =\text { original contract amount } \\
& B=\text { original contract time } \\
& C=8 \% \\
& D=\text { Average overhead per day. }{ }^{391}
\end{aligned}
$$

The courts of New York, which have rejected the Eichleay formula, developed an additional overhead theory based on total payment requisitions and bid amounts of overhead and profit. The court in Manshul Construction Corp. v. Dormitory Authority ${ }^{392}$ developed

Unabsorbed Overhead Costs and the Eichleay Formula, 147 MIL. L. Rev. 262 (1995); P.A. McGeehan and C.O. Strouss, Learning from Eichleay: Unabsorbed Overhead Claims in State and Local Jurisdictions, 25 PUB. CONT. L.J. (Winter 1996).
${ }^{387}$ Berley, 385 N.E.2d at 284. Under federal construction law, the amount of work remaining when work is suspended is only relevant to show whether the contractor could have taken on replacement work during the delay period. Satellite Elec. Co. v. Dalton, 105 F.3d at 1420 ( 96.7 percent of the work had been completed when the contract was suspended; the value of the remaining work was less than $\$ 30,000$ ).
${ }^{388}$ See supra note 316 , for states where Eichleay has been used to compute delay damages. See also note, Home Office Overhead as Damages for Construction Delays, 7 GA. L. REV. (1983).
${ }^{389}$ A.T. Kelmens \& Sons v. Reber Plumbing \& Heating Co., 139 Mont. 115, 360 P.2d 1005, 1011 (1961).
${ }^{390}$ Standard Specification 5.12.6.2 (2000).
${ }^{391}$ The amount calculated by this formula includes job site overhead as well as extended home office overhead. Standard Specification 5.12.6.2 (2000).
${ }^{392}$ Manshul Construction Corp. v. Dormitory Auth., 79 A.D. 2d 383, 436 N.Y.S.2D 724 (1981).
a overhead formula by ascertaining the total requisitions in the delay period, then subtracting the portion allocable to overhead and profit, which culminated in the cost of the work after the completion date. The court than applied the bid percentage for overhead to arrive at the unabsorbed overhead amount.

Since overhead is incurred by labor costs, other more accepatable accounting theories include calculating overhead based on labor dollars or allocating the total overhead based on a percentage of labor of the project involved in the claim divided by labor cost for the entire company.

The Colorado Department of Transportation has a standard clause that determines home office overhead for the extended contract period by adding 10 percent of the total cost of additional wages for nonsalaried labor as a result of the delay and the cost of additional bond, insurance, tax, equipment costs, and extended job site overhead. No additional home office overhead expenses are allowed. ${ }^{393}$ Instead of a fixed percentage rate, the overhead clause may contain a declining scale. As the value of the direct costs increase, the allowance markup percentages on direct costs decrease. ${ }^{394}$

Home office overhead claims usually arise because work is suspended or delayed, not because the duration of the contract is extended by added work. Contractu-ally-fixed markups do not address home office expenses where work is suspended because no work is performed during the suspension period, and the only direct costs that are being incurred are idle equipment on standby, field facilities, and perhaps field supervision. Those costs may form an inadequate base for determining home office overhead costs during the suspension period. In this situation, some other method must be used to calculate unabsorbed overhead, if the Eichleay formula is not used. Most methods require assistance from accountants or other financial experts in analyzing the contractor's books and records. ${ }^{395}$

Judicial tuning of the Eichleay formula may make it more palatable to owners. Limiting use of the formula to situations where the contractor cannot take on replacement work, ${ }^{396}$ but must "standby" still gives the owner some options. If the delay could be extensive, the

[^60]owner can tell the contractor to seek other work until the problem causing the delay can be resolved. The owner may also have the option of terminating the contract for convenience, where the contract contains a termination for convenience clause. This option allows the owner to avoid further delay damages, which may be cheaper than allowing the damages to continue.

## 6. Delay and Disruption Damages

Delay and disruption are events occurring during contract performance that affect the work. ${ }^{397}$ Although not synonymous, a delay may disrupt work and a disruption may delay contract performance. But the damages that flow from delay and disruption are different. Delay damages typically include extended overhead, both in the home office and field; idle equipment during standby; and escalated labor and material costs due to inflation. The damages that flow from disruption are loss of productivity and usually increased labor costs due to inefficiency. To recover delay damages, the contractor must show that the delay extended the project beyond the scheduled completion date or an earlier completion date, if the contractor can prove that it intended to finish early and was prevented from doing so. ${ }^{398}$ It is not necessary to show that project completion was delayed to establish damages for disruption. The "ripple" effect refers to the impact that one contract has on other contracts and is considered as consequential damages and not recoverable in a suit for breach of contract. ${ }^{399}$

The nexus between entitlement and damages is causation. It ties entitlement to damages and establishes the effect that the event had upon contract performance. For example, assume that a highway construction contract provided that a bridge, to be constructed under another contract, would be available to the contractor on September 1. The bridge provides access for grading equipment to the western portion of the project site. The bridge is not available until October 1. The project completion date is extended 1 month. The contractor is on standby during September and has a claim for idle equipment and extended overhead. The three elements of a claim have been established: breach or entitlement (bridge not available on September 1 as promised); damages (extended overhead and idle equipment); and causation (unavailability of the bridge caused the damages. If the bridge had been available, the equipment

[^61]would have been working, not idle, and the project would not have been delayed).

Now assume that the contractor was tied up on another, separate project and even if the bridge had been available, the project would still be delayed. In short, a concurrent delay ${ }^{400}$ has occurred. The owner delayed the contractor and the contractor delayed itself. Neither party can recover damages from the other for the delay. Assume now that the equipment is on-site on September 1 and goes on standby, but because of heavy rain, part of September is too wet to perform earthwork. Thus, there are some days in September when the equipment would have been idle. Also, the project completion date would have been extended by those days in September that were unworkable. Under this scenario, the owner would only be partially responsible for the delay. A simple case. The only thing that might be in dispute, other than equipment standby rates and overhead damages, is whether certain days were or were not workable. No scheduling analysis is needed to identify concurrent delays and other events that could affect causation.

Now assume that a project involves over 3000 construction activities performed by the general contractor and nine subcontractors. Assume further that the project was scheduled for completion in 2 years but took 3. Assume that the contractor claims: 1) that the project was mismanaged by the owner's construction manager, 2) that the plans contained numerous errors, 3) that DSCs were encountered, 4) that numerous unilateral change orders were issued that remain in dispute, 5) that the owner's representatives were unreasonably slow or missed turn-around dates in reviewing shop drawings and other submittals, 6) that the owner's representatives were unreasonably slow in responding to the contractor's requests for information about plan clarifications, and 7) that there was over-inspection and other owner interferences with the work. Assume the owner's construction manager denies the contractor's allegations and claims that the contractor's wounds and problems were self-inflicted, 8) assume the owner's architect/engineer (designer) denies that the plans are defective and claims that the requests for information were submitted only to further a claim that the contractor intended to make from the outset of the project, and 9) assume the subcontractors, several of whom have filed bankruptcy, have submitted claims to the general contractor, who has passed them on to the owner.

The claim is for breach of contract, delay, disruption and other impacts on the work, extra work caused by defective plans, DSCs, and remission of liquidated damages. There are also claims for lost opportunities, business destruction, and consultant and attorneys' fees. The contract and the law recognize concurrent delay as a defense to delay claims. The DSCs clause in the contract does not allow impact damages for the effects of the condition upon unchanged work, but changes clauses may allow such damages unless the

[^62]contract contains a "no-pay-for-delay" clause. This is a large, complex claim and will require a detailed causation analysis using a CPM to assign responsibility for delay, and determine which clause will be enforceable.

## 7. CPM Schedules

## a. CPM Scheduling

A CPM schedule graphically depicts the sequence and duration in which certain work activities must be performed to complete the project within the time specified in the contract. The contractor estimates the order and duration of each important work activity. This estimate is then programed by a computer, which produces a schedule showing each critical work item. The line on the schedule depicting those activities, their durations, and their interdependencies is the critical path. ${ }^{401}$ The critical path is not rigid. It may change as conditions change during contract performance. For example, noncritical items of work may become critical if they are unduly delayed, affecting the critical path.

Originally, CPM scheduling was developed as a management tool to assist both owners and contractors. CPM scheduling allowed contractors to plan and control their work with more precision and reliability than they could using a bar chart. ${ }^{402}$ CPM scheduling allowed an owner to determine whether the contractor's plan for performing the work would allow the project to be completed within the time specified in the contract. It also allowed both the contractor and the owner to monitor the work as construction progressed to determine if the work was on schedule and identify potential problems that could delay completion of the project. ${ }^{403}$

## b. The Use of Scheduling Analysis for Delay and Disruption Claims

CPM scheduling has been used to analyze delay and disruption claims. For delay claims, the contractor has to show that the event causing the delay actually de-

[^63]layed work on the critical path. ${ }^{404}$ The schedule analysis focuses on comparing two project schedules: The "asplanned" schedule (the schedule the contractor intended to follow in constructing the project), and the "as-built" schedule, which shows how the project was actually constructed. The comparison identifies project delays. Once delays are identified, the cause of the delay can be analyzed and responsibility for the delay determined. This is the "but-for" schedule, which shows how the project would have progressed had the events causing the delay not occurred. ${ }^{405}$ In preparing this schedule, it is necessary to determine what activities have been delayed and the extent of the delays. The analysis should address any concurrent delay. ${ }^{406}$ This can be done by identifying delays that are not the owner's fault. The "but-for" schedule must be accurate. ${ }^{407}$ Disruption may be proved by a similar analysis. The "asplanned" and "as-built" schedules can be compared to show the difference between how the work should have been performed and how it was actually performed. This allows the analyst to focus on the events that caused the disruption and the extent or duration of the disruption. Scheduling analysis requires the use of experts.

Some states' schedule provisions require all delays to be measured by using the latest approved schedule so as to assess the true impact of the delays.

The contract should require the contractor to furnish the owner a complete scheduling and plotting software package used by the contractor in preparing the claim. The contract should provide that the software package is licensable by the owner to avoid copyright disputes. The contract should also require a copy of a floppy disk containing the contractor's progress schedule data files as part of its original schedule submittal. The data files contained in the floppy disk should be sufficiently complete to allow an independent analysis of the schedule using the scheduling software package. A contractor who claims delay damages should be required to show how and the extent to which the critical path was delayed. The owner should be in the position of reviewing whether the claim is supported, and not in the position of trying to determine how the various claim events impacted the critical path. Justifying the claim is the

[^64]contractor's responsibility, not the owner's. Failure to provide this information should be reason for rejecting the delay claim.

In light of the massive effort of appellant's delay expert (findings 147), appellant clearly could have reconstructed and inputted the change order information at the proper times into the CPM schedule had appellant prepared and maintained proper records as to when the change order and constructive change work had been performed, (finding 167). Appellant's failure to prepare and maintain these records is clearly inexcusable in light of the clear contract requirements that this type of information be provided to maintain the accuracy of the CPM schedule (finding 16 II $1.4 \& \mathbb{I}$ 15). Accordingly, appellant's delay claims cannot be granted. ${ }^{408}$

## c. Practice: New Scheduling Innovations

NYSDOT is in the forefront of new developments in CPM systems. New York has adopted the Enterprise Web-based solutions, which enable all interested parties to share project information on a real-time basis. The Enterprise system is used in the design phase and is a valuable tool in the construction phase of the project. New York has secured site licenses for contractor and department personnel. By utilizing Primavera 6 and Enterprise data warehouse, all users, which include contractor and department personnel, are able to review CPM schedules to analyze schedule issues, claims, and issues as they occur. The project schedule is available to all online and is used as a management tool by all parties to mitigate and analyze delays and project issues. The format of the schedule is given to the contractor, who builds the schedule on the DOT server by inputting the basic required schedule information, including production rates.

This process eliminates paper and disc submissions and allows all parties to have access to the same information at the same time, making it possible to resolve issues quickly and efficiently. The system facilitates collaboration between the contractor and the department. It enables all parties to share in the plan information and measure job progress during construction. The system, along with "Contract Manager," is being implemented in the $\$ 407$ million Alexander Hamilton Bridge Rehabilitation, which requires weekly schedule submissions and meetings to review and update the project schedule. In addition, New York has adopted an automated contract management system to maintain and share field documents, including inspection reports, engineers' diaries, contract documents, and submittals. The schedule tracks all submittal shop drawing and requests for information. Delays are analyzed, milestones adjusted and documented if appropriate, and mitigation strategies are developed to keep the project moving. In addition, the system permits the project teams to review look-ahead activities, analyze lowfloat activities, and review upcoming change or-

[^65]ders. ${ }^{409}$

## 8. Consequential Damages, Other Costs, and Profit

## a. Consequential Damages

When a project is delayed by the owner, the contractor may make a claim for lost profits on other projects that the contractor was unable to bid because of the delay. The contractor may assert that the delayed project tied up its bonding capacity, preventing it from bidding other projects where bonding was required. To support its claim, the contractor may submit a list of projects that it intended to bid, its success rate in submitting winning bids, and its profit history. Generally, such claims are denied as too speculative because they are based on assumptions or possibilities, not probabilities. ${ }^{410}$

Recovery for lost profits due to lost business opportunities, however, has been allowed when such damages were reasonably foreseen and contemplated by the parties when the contract was made, are a probable consequence of a breach, and can be proven with reasonable certainty. ${ }^{411}$ An owner seeking an order from a court summarily dismissing a lost profits or lost opportunities claim should focus on the remote and speculative nature of such damages, forcing the contractor to show that they were contemplated by the parties when the contract was let, that they are a probable consequence of the breach, and that they can be proven with reasonable certainty. If the contractor cannot make that showing, the claim should be dismissed as a matter of law. ${ }^{412}$

Contracts may contain clauses barring consequential
${ }^{409}$ Address of Mark White, NYSDOT, and Manual Silva, AGC/DOT Annual Technical Conference, Saratoga Springs, N.Y., Dec. 8, 2011.
${ }^{410}$ Manshul Constr. Corp. v. Dormitory Auth., 111 Misc. 2d 209, 444 N.Y.S.2d 792, 803 (1981) (a case of first impression in New York). See also Golf Landscaping, Inc. v. Century Constr. Co., 39 Wash. App. 895, 696 P.2d 590 (1984); United States v. Merritt Meridian Constr. Corp., 95 F.3d 153, 161 (2d Cir. 1996). In Manshul Constructions, the court characterized the contractor's assumptions that it would obtain other contracts and make a profit as wishful and too speculative to stand as a matter of law, 444 N.Y.S.2d at 803-04. See also Land Movers, Inc. and O.S. Johnson-Dirt Contractors (JV), ENGBCA No. 5656, 91-1BCA II 23,317, at 14-15 (1990), (Board said that it was unaware of any Board or federal court decision where consequential damages were allowed); Zook Bros. Constr. Co. v. State, 171 Mont. 64, 556 P.2d 911, 918 (Mont. 1976) (loss due to contractor having to sell its equipment not allowed).
${ }^{411}$ Hadley v. Baxendale, 9 Ex. 341, 156 Eng. Rep. 151 (1854); Lass v. Mont. State Highway Comm'n, 483 P.2d 699, 704 (Mont. 1971); Larsen v. Walton Plywood Co., 65 Wash. 2d l, 390 P.2d 677, 687 (1964); Gouger \& Veno, Inc. v. Diamondhead Corp., 29 N.C. App. 366, 224 S.E.2d 278, 279 (1976).
${ }^{412}$ Manshul Constr. Corp. v. Dormitory Auth; 444 N.Y.S.2d at 802-04; Golf Landscaping, Inc. v. Century Constr. Co., 696 P.2d at 594-95.
damages. ${ }^{413}$ Inclusion of this type of clause serves two purposes: First, it bars lost profit claims and other consequential damage. ${ }^{414}$ Second, inclusion of the clause clearly establishes that consequential damages were eliminated by the parties as a probable consequence of a breach when the contract was signed. As noted earlier, this is an element (among others) that the contractor must prove to recover lost profits. A classic example of such clauses is provided by FDOT Section 5-12.10, which provides no recovery for consequential damages including, but not limited to, loss of bonding capacity, loss of bidding opportunities, loss of credit standing, cost of financing, interest paid, loss of other work, or insolvency. The AASHTO Guide Specifications also list loss of profit more than what is provided in the contract, loss of profit, attorneys' fees, claim preparation expenses, and litigation costs. ${ }^{415}$

## b. Financing Costs

In the absence of a clause in the contract or a statute barring recovery, interest paid on money borrowed to finance the work may be recovered, if the contractor can prove that the money was borrowed solely because of owner-caused delays and extra work. ${ }^{416}$ To recover, the contractor must show that interest was paid to an independent entity, such as a bank. In other words, the contractor cannot recover interest on funds that it furnished to itself to finance the extra work or delay costs. ${ }^{417}$ The contractor must be able to trace the interest paid for the borrowings, ${ }^{418}$ and prove that the borrowed funds were actually used to finance the extra work or delay costs caused by the owner. ${ }^{419}$ Recovery will be denied if the contractor cannot segregate the

[^66]interest paid on the borrowings from the interest paid on its general line of credit. ${ }^{420}$

## c. Prejudgment Interest

Recovery of prejudgment interest may be allowed when the claim is liquidated ${ }^{421}$ or sovereign immunity does not apply. ${ }^{422}$ Damages are not liquidated where the amount owed requires determination by a jury. ${ }^{423}$

Prejudgment interest, when owed, runs from the date on which payment is due until it is paid. ${ }^{424}$ Under the Contract Disputes Act, ${ }^{425}$ federal agencies are required to pay interest on contract claim settlements or awards from the date the contracting officer receives a properly certified claim until the claim is paid. ${ }^{426}$ Some states have adopted "prompt payment" acts. Under these acts, a state agency is liable for interest, at a specified rate, if it fails to make a payment due the contractor within 30 days after receiving the contractor's invoice. ${ }^{427}$

## d. Bond and Insurance Costs

Increased bond and insurance costs caused by owner delay are compensable ${ }^{428}$ unless recovery is precluded by a "no-pay-for-delay" clause in the contract. ${ }^{429}$ Increased bond and insurance costs may be included as part of an equitable adjustment under a changes clause where added work or compensable delay extends the contract's duration. ${ }^{430}$

[^67]
## e. Attorney Fees

Under the "American Rule," each litigant bears its own attorneys' fees. ${ }^{431}$ However, there are exceptions to the rule. One exception is where the contract allows fees to the prevailing party. ${ }^{432}$ Another exception is where fees are allowed by statute. ${ }^{433}$ In addition to contractual provisions and statutes as grounds for awarding fees, courts have awarded fees based on equity, ${ }^{434}$ or for federal construction where legal fees are incurred by the contractor as costs of performing the contract, as opposed to costs associated with prosecuting a claim. ${ }^{435}$ This rule has been applied in state public works disputes. ${ }^{436}$

## f. Claim Preparation Costs

The rule that attorneys' fees are not allowed in claims against the Government applies to claim preparation costs. ${ }^{437}$ Legal, accounting, or consulting costs incurred in connection with the prosecuting of a Contract Disputes Act claim are unallowable because they were not incurred to benefit contract performance. However, like attorneys' fees, consulting costs incurred during contract performance that result from changes ordered by the Government may be recoverable. ${ }^{438}$ Alaska follows this view. ${ }^{439}$

[^68]
## g. Profit and Markup

A contractor is entitled to a reasonable profit on the cost of performing extra work, ${ }^{440}$ even if the original contract price (bid) did not contain any profit. ${ }^{441}$ The rate of profit allowed may consider the risks and difficulties involved in performing changed or extra work. ${ }^{442}$ The contract may specify the profit rate or specifically preclude profit on certain costs, such as delay costs incurred under a Suspension of Work clause. ${ }^{443}$

A contractor may also recover overhead allocable to direct costs incurred due to owner-caused delays or extra work. Overhead is usually calculated as a percentage of the direct costs, but does not include any recovery for unabsorbed or extended home office overhead. Those costs are calculated separately as discussed earlier. ${ }^{444} \mathrm{~A}$ contractor may also be entitled to a markup on the award of extra costs to its subcontractor on a passthrough claim. ${ }^{445}$

## D. CONSTRUCTION CONTRACT LITIGATION: TRIAL PREPARATION AND STRATEGIES

## 1. Introduction

Construction claims seem inevitable. ${ }^{446}$ Virtually every construction project has disputes over money, time extensions, or both. The disputes are usually resolved by the parties through negotiations. When they are not settled, the next step may be litigation or arbitration. ${ }^{371}$

While the rules for trying cases may vary from jurisdiction to jurisdiction, the litigation process is generally the same in most jurisdictions. The contractor, who is typically the plaintiff, files a complaint in court against the owner for damages. ${ }^{448}$ The owner files a response in the form of an answer denying the claim. ${ }^{449}$ The answer

[^69]may assert affirmative defenses, ${ }^{450}$ which if proven would bar or limit the claim. The answer may also include a counterclaim. ${ }^{451}$

Once the case is at issue and the parties have formally stated their positions, pretrial discovery takes place, usually through interrogatories, document production requests, and depositions. ${ }^{452}$ Consideration should be given for the public owner to obtain priority to conduct depositions, and to obtain discovery of records, without awaiting completion of claimants' discovery efforts. In addition, either party may try to narrow the case and define the issues that will be tried through requests for admissions and pretrial orders. ${ }^{453}$ Pretrial motions may be made to dismiss claims or even to dismiss the lawsuit in its entirety. ${ }^{454}$ Motions in limine may be made to exclude evidence and prevent witnesses from testifying about matters that are not admissible. ${ }^{455}$

Consideration should be given to requesting the court to preassign a large, complex construction case to one judge for all pretrial motions and the trial. In some jurisdictions this may be automatic, but in others it may require a motion by the party to have the case preassigned. Consideration should also be given to bifurcating the case into a liability phase and then a damage phase, if liability is found. ${ }^{456}$ Counsel should consider the use of summaries where the documents are too voluminous to be conveniently examined in court. ${ }^{457}$ In complex or extended cases, a trial judge may permit the jurors to take notes. If the jurors are permitted to take notes, the jurors should be instructed by the court to be guided by their own individual recollections of the evidence and not be swayed by one juror who took copious notes. Finally, care should be taken in drafting jury instructions. Jury instructions must do more that just accurately state the law; they must also be understandable. "A charge ought not only be correct, but it should

Mediation Procedures, Rule R-4(b) (American Arbitration Association 2003) [AAA Constr. Rules]. The Rules may be obtained from the AAA Customer Service Department, 140 W. 51st Street, New York, N.Y. 10020-1203, telephone: (212) 4844000, fax no: (212) 765-4874. AAA rules are also available on AAA's Web site at www.adr.org.
${ }^{450}$ Subpart 6.D.6.b infra discusses affirmative defenses. The appendix to this Subsection lists affirmative defenses that may apply.
${ }^{451}$ See, e.g., FED. R. CIV. P. 13; AAA Constr. Rule R-4(b).
${ }^{452}$ Discovery methods are discussed in Sub.A.4.a.
${ }^{453}$ Requests for admission and pretrial motions are discussed in Subsections 6.D.4.a and 6.D.6.c respectively infra.
${ }^{454}$ See FED. R. CIV. P. 56.
${ }^{455}$ See G.O. Kornblum, The Voir Dire, Opening Statement, and Closing Argument, 23 Prac. LAW. No. 7 at 1, 21 (1977).
${ }^{456}$ FED. R. CIV. P. 42 and advisory committee note to 1966 amendment.
${ }^{457}$ See FED. R. EvID. 1006.
also be adapted to the case and so explicit as not to be misunderstood or misconstrued by the jury." ${ }^{458}$

When discovery is completed, the case is ready for trial and a trial date is set. ${ }^{459}$ The keys to success in litigation are often expressed in two words: preparation and credibility. These keys are interrelated. A solid strategy is also important in trying the case. Construction litigation often involves a mass of details and acts that may impact numerous construction activities. It is therefore essential that the case be simplified and presented in a way that will persuade a judge, jury, or an arbitrator that the agency's position is fair and legally correct.

Careful preparation is also important to avoid overpreparing the case, which can waste time and money, and under-preparation, which can be disastrous. The construction trial lawyer should develop a plan at the outset of the case to guide case preparation between these two extremes. The purpose of this subsection is to suggest ways that will assist the trial lawyer in preparing and trying the case. While the focus of this subsection is on defending claims against public owners, much that is said here may also be used by owners in prosecuting claims against contractors.

## 2. Trial Preparation-Organizing the Case

There are several preliminary steps in organizing the case. The first step is understanding the claim. A good place to start is with the claim that the contractor filed with the agency as part of the administrative claim process. ${ }^{460}$ This is especially true when the contract requires that the claim contain sufficient information to ascertain the basis and the amount of the claim. ${ }^{461}$ If the claim lacks the required detail, it may be subject to dismissal where compliance with the claims specification is a contractual condition precedent to judicial relief. ${ }^{462}$ Another source of information is the complaint,

[^70]although most complaints contain broad allegations and few specifics. The attorney should also review the final acceptance papers, where the contract requires the contractor to reserve its claims and to release those claims that are not reserved. ${ }^{463}$

After reviewing the claim documents, the next step is usually a meeting with agency personnel to discuss the claim. ${ }^{464}$ The meeting has several purposes. The primary purposes are to obtain more information about the claim, help develop the agency's position in the lawsuit, answer questions, explain legal procedures, and explain what will be expected of those involved. A secondary purpose is to refresh and reinforce the knowledge and memories of others through a group discussion. The meeting is also an opportunity for the attorney to make preliminary judgments about whom he or she could call as witnesses in the case.

The meeting should be orderly, but also uninhibited. Project personnel should be encouraged to speak freely, or even refute what others have said when they disagree. This too serves several purposes. First, it provides an opportunity to resolve differing recollections or interpretations of events that occurred during construction. Second, it is also an opportunity to assess the relative merits of the agency's position with respect to the claim. It is far better to learn about problems with the agency's position in a meeting like this than in a deposition or, even worse, at trial.

Normally, conversations between agency personnel and the agency's attorney, in preparation for litigation, should be privileged under both the attorney-client privilege and the attorney work-product privilege. But as a practical matter, the attorney should not automatically assume that such conversations are privileged and therefore immune from discovery. Instead, the attorney should carefully review the precedents of his or her jurisdiction before deciding whether to memorialize conversations in recordings. ${ }^{465}$

Either prior to the meeting or after, the attorney should conduct a detailed review of the administrative records maintained by the agency to get a complete understanding of the history, personnel, and issues of the claim. While not always feasible given the attorney's work schedule, reviewing the records prior to the meeting will provide the attorney with a greater opportunity to make a more effective use of the meeting by posing informed questions to project personnel.
stated in written claim, and may not be amended in court proceeding or arbitration).
${ }^{463}$ California Department of Transportation Standard Specification 9-1.07B (2002) and New York Standard Specification 109-14 (2002) are examples.
${ }^{464}$ The meeting often includes a visit to the project site, which is usually helpful in understanding the claim.
${ }^{465}$ The subject of attorney-client and work-product privileges is discussed in Sub.D.2.e. infra.

## a. The Claims Summary

Following the meeting, the attorney should have enough information to develop a "claim summary" for the attorney's trial notebook. The summary should contain the following information and be inserted loose-leaf in the notebook to allow pages to be added or replaced as the attorney becomes more familiar with the facts. The summary may contain:

- A brief description of the project, together with a simple drawing or sketch illustrating the construction features involved in the claim.
- A chronology of the project showing: 1) when the contract was executed, 2) when the contractor was given notice to proceed, 3) when the contractor began work, 4) when substantial completion occurred, and 5) when final acceptance occurred.
- The number of days that the contract overran, if applicable.
- The bid price.
- Significant change orders.
- Time extensions.
- Edition of the Standard Specifications that applies to the contract.
- Significant plan sheets from the contract plans and why they are significant.
- Any amendments to the Standard Specifications.
- Any permits issued by governmental agencies that affect construction.
- Pertinent special provisions.
- A reference to pertinent photos and videos, what they show, and who has custody.
- Significant diary entries, inspector's daily reports, memoranda, and letters identified during the meeting with project personnel.
- List of significant subcontractors and material suppliers who may have information pertinent to the claim, but do not have pass-through claims.
- Job site arrangements, such as material storage areas, haul roads, and access restrictions that may affect construction.
- List of contractor personnel whom agency personnel believe may have information pertinent to the claim and a brief description of what that information entails.
- Significant weather days by date that affected construction.
- Consultants who participated in the preparation or review of the contract plans and specifications, soils reports, and shop drawings, as they pertain to the claim.
- Brief statement of the contractor's position regarding each claim.
- Brief statement of the owner's position regarding each claim.
- Pertinent case law and statutes (citations).
- Affirmative defenses that may be asserted.
- Project personnel and their connection with the claim, general observations about them from the meeting, and their phone numbers and fax numbers.

Typically, the next step in the process is to file an answer to the complaint. This pleading is the principal vehicle for stating the owner's position in the case. Under most court rules, it must be a section by section response admitting or denying each numbered paragraph of the complaint. The answer may also contain affirmative defenses and counterclaims. Affirmative defenses may include any factual or legal defense that is appropriate. ${ }^{466}$ Prior to filing the answer, the attorney should meet with the agency to review the claim, contract provisons, and proposed affirmative defenses. Failure to assert a mandatory counterclaim (one involving the same contract that gives rise to the claim) in the answer may waive the counterclaim. ${ }^{467}$

## b. The Litigation Team

There are some initial considerations in organizing the litigation team and developing a litigation plan. Construction litigation can be very expensive. Because it can be so expensive, an owner should consider whether the case can be resolved short of trial through further negotiations or mediation. ${ }^{468}$ If so, the initial preparation of the case should be limited to those steps necessary for effective mediation. Experts should be retained early, but given limited assignments necessary for the mediation process. Discovery should be limited to a few key depositions, or there even should be a moratorium on depositions, except perhaps for record depositions for subcontractors, suppliers, or other nonparties. ${ }^{469}$ These steps are important in achieving a cost-effective resolution of the case. If mediation is not successful, then the more expensive and laborious discovery and case preparation can begin. Typically, in a large construction case, the litigation team will be composed of a lead trial counsel, other attorneys as necessary, paralegals, support staff, and experts who can either be in-house experts, retained experts, or both. Many state transportation agencies utilize claims engineers or auditors, who assist the trial attorney with claims defense and preparation and coordinate the agency claims defense with witness and record production.

## c. Locating and Retaining Experts

Most complex construction cases will require the use of expert testimony. Claims consultants are usually retained at an early stage to assist the litigation team in developing an overall trial strategy, as well as assist

[^71]in more discrete tasks such as developing issues for document coding and assisting in the preparation of discovery requests. In the absence of an agency claims engineer, the claims consultant can also assist in the selection of other experts needed to cover gaps in the case.

In selecting an expert witness, it is important, even critical, to keep in mind that the expert will probably testify if the case goes to trial. Therefore, the person selected must not only be an expert and qualified to testify, but the expert must be a good witness, someone who will impress the judge or jury. In addition to being credible, the expert should be experienced in litigation and be able to think and handle himself or herself under cross-examination. The expert should be able to present ideas clearly and persuasively in plain language. Ideally, the expert should be able to make the complex simple and readily understandable by a judge or jury. Above all, the expert should be able to present opinions in a comprehensible, convincing, and understandable manner on direct examination and defend them in the same way under hostile cross-examination.

Where do you find a claims consultant to help defend the claim? One source is to ask other lawyers whom they have retained in similar cases. Another source is a national list of construction experts published by the American Bar Association. The list will usually include several attorneys as references. In checking with the references, you should ask each attorney whether the expert testified for that attorney. If not, obtain from the expert the names of attorneys for whom the expert has testified. ${ }^{470}$

Some considerations in retaining an expert include the following. First, always retain the individual who will testify, not a firm that will select the witness. The agreement for consultant services can be with the firm, but the agreement should specify the person that will testify, if requested by the attorney. ${ }^{471}$ For example, the standard agreement used by the Washington State DOT provides that, "the Consultant shall designate (name of expert) to provide factual and expert consultation to owner and testify as an expert witness, if so designated by owner's counsel." Second, the agreement should also provide that work and work product produced by the consultant shall be deemed confidential until the owner desires to designate the consultant as

[^72]an expert witness: All information developed by the consultant should be confidential and should not be revealed by the consultant to any other person or organization without the express consent of the owner or by court order.

## d. The Litigation Plan

The litigation plan is an outline identifying the key issues in the case. The issues in the outline are given numbers for use in coding and indexing documents, and form the basis for establishing a method of retrieval. The better and more complete the outline, the more efficient retrieval will be. This portion of the outline should be done by someone who has a good understanding of the case and is thoroughly familiar with a computerized litigation support system. Usually, that person is the claims consultant. At this point in the litigation, a decision should be made whether to retain an outside litigation support firm or use an in-house computer and in-house staff for coding documents with issue numbers. This presupposes that a decision has been made to use a computerized system instead of a manual index and retrieval system. An outside support firm should be used if the agency does not have experience using an in-house computer for litigation support.

The plan should also designate the attorneys and paralegals who will have primary responsibility for certain issues and for gathering and controlling documents. The plan should provide for the development of a standard form for coding and indexing the categories of information that will be stored in the computer. The form should contain a line for a Bates number ${ }^{472}$ that has been stamped on each page of each document. The coder reviews a document and fills out the form for entry in the computer. An alternative is use of an imaging system in which documents are electronically scanned and stored on disks for later retrieval.

The plan should also provide for a chart showing various tasks that have to be performed, who is responsible for performing them, and the time allotted for performing each task. The chart can be a simple bar chart, or for the more technically inclined, a CPM chart. But whatever its form, its purpose is to provide direction for the overall team effort in preparing the case. The plan should also contain a budget estimating the cost of case preparation up to the time of trial.

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## e. Attorney-Client and Work-Product Privileges

The attorney-client privilege is recognized in every state. ${ }^{473}$ Generally, the privilege applies to conversations between a government entity to the same extent that privilege would apply between a private entity and its attorney. ${ }^{474}$ The cases recognize "the need of the government client for assurance of confidentiality equivalent to a corporation's need for confidential advice. ${ }^{3775}$ However, scholarly opinion is divided with respect to whether government entities should have the privilege. ${ }^{476}$

The work-product privilege protects an attorney's efforts in preparing a case for litigation. ${ }^{477}$ The privilege extends to confidential communications between the employees of a corporation and the corporation's attorneys, where such communications are necessary in enabling the corporation to obtain legal advice and prepare for litigation. ${ }^{478}$ The work-product privilege, like the attorney-client privilege, has been extended to government entities. ${ }^{479}$ The privilege protects communications between an attorney and a consulting expert who will not be called to testify at trial. ${ }^{480}$ But the privilege is waived when the expert is identified as a witness who will be called to testify, ${ }^{481}$ or when the consulting expert's report is provided to a testifying expert. ${ }^{482}$

[^74]${ }^{481}$ Karn v. Ingersoll-Rand, 168 F.R.D. 633, 635 (N.D. Ind. 1996) (information given by an attorney to an expert witness

## 3. Gathering and Managing Documents

There are several keys to the successful preparation of a large construction case. You must understand the claim, you must have a theory as to why the claim is not valid, you must have the facts to support your theory, and you must have the resources to prove those facts. This subsection focuses on obtaining documents and then organizing them so that they can be retrieved from storage, as needed, in an orderly and efficient manner for use in defending the claim.

Generally, the facts about what occurred during a construction project are found in two places: the recollections of personnel associated with the project and the project documents. Organizing and managing documents is often the most time consuming and laborious task in case preparation. This subsection offers some suggestions about where to obtain project documents and what to do with them once they are obtained.

## a. Gathering Documents

Where do we get documents? The answer seems obvious: from the contractor, first, and lower tier subcontractors and materialmen that have pass-through claims or whom we suspect may have useful information. Other obvious sources are the agency's own records and those of its design consultant, if the claim is based on defective plans and specifications. Obtaining records from this latter source may require a decision by the agency as to whether it intends to make a claim against the designer for indemnification. Designers are usually reluctant to open their records to inspection by someone who intends to sue them. Often, the designer will want to know, early in the case, what the agency's position is on that issue.

Consideration should also be given to utilizing contract audit provisions, which provide the agency access to a myriad of the contractor's financial records. Contactor records worthy of examination include foreman's daily reports, job diaries, superintendent's reports, correspondence with subcontractors and suppliers, subcontracts, and all payment records, invoices, job-cost ledgers, financial statements, bid estimates, and workup sheets.

Another obvious source is the records of the contractor's claim consultant, especially the software used by the consultant to generate "as-built," "as-planned," and "but-for" schedules to support delay and impact claims. The contract should require the submission of this type of information as part of the administrative claims process. If not, then this information probably cannot be obtained until the consultant is designated as an expert witness. When that designation is made, the consultant's work product is discoverable.
had to be disclosed; disclosure could not be avoided by claiming that the information was work product).
${ }^{482}$ Heitmann v. Concrete Pumping Machinery, 98 F.R.D. 740,742 (E.D. Mo. 1983).

There are, however, some less obvious sources of information. For example, ask the project office if the contractor obtained any documents from the agency before the lawsuit or even the claim was filed. The agency should have a policy of making a copy of or keeping a record of every document furnished to the contractor after a claim has been made or a dispute has arisen. If the agency did not keep a record or copies, the information will have to be obtained through discovery, usually through an interrogatory. Counsel for the agency should contact FHWA to see if the contractor has obtained any documents from that agency through FOIA. ${ }^{483}$ Counsel should also contact other federal regulatory agencies such as the Coast Guard, the Army Corps of Engineers, or the Department of Labor about documents obtained from them under FOIA requests, when the claim involves actions by these agencies or involves matters within their jurisdiction.

Another source of information is the performance bond surety. The surety may require a contractor to make a report to the surety about the project and the contractor's basis and evaluation for claims that it has against the owner. Counsel should request the surety to furnish the information without having to resort to a subpoena duces tecum. Counsel should also check with local regulatory agencies about any documents that the contractor may have obtained from them. Counsel should also contact other bidders to see how they bid the work and if they are willing to help.

Usually other bidders or contractors on the project are reluctant to get involved, but not always. For example, in one case the second bidder testified for the State of Washington that in making its bid it included the cost of reinforcing steel bars in certain precast concrete members, even though steel bars were not shown in the plans. The contractor, who was the low bidder, claimed that it did not include the cost of steel bars in its bid because they were not shown on the plans, and that bars had to be used to prevent the concrete members from cracking when they were removed from the concrete forms. The contractor claimed additional compensation for the steel and other damages. The representative of the second low bidder was a powerful witness. His testimony helped persuade the judge that the cost of steel was incidental and should have been included in the bid price because the members could not be made without steel, and that the contractor, as an experienced concrete fabricator, should have known this.

## b. Organizing the Documents

Once the documents are gathered, they can be photocopied, microfilmed, or imaged. Under this latter process, each document page is placed on a scanner,

[^75]which takes an image of the document, similar to a photocopier, and stores the image on a disk. Documents that have been microfilmed can be reproduced as hard copies.

There are, however, certain steps that should be taken before the documents are stored and organized for later use. The first step is to stamp an identifying eight-digit number on the lower right hand corner of each page of each document. ${ }^{484}$ After the documents have been stamped, they should be put in chronological order. Once documents are arranged in chronological order, the next step is to develop a working set that can be used for coding the documents. This involves two more steps. The first task is to cull duplicate copies. Care must be taken in performing this task. Only duplicate copies that are identical are removed. If one copy of a memorandum is clean and the other copy has marginalia, they are not duplicates, they are separate documents. Once duplicate material is culled from the working set, the next step is to eliminate documents that clearly have nothing to do with the lawsuit. Irrelevant documents, however, should not be discarded. They should be kept in separate, chronological files in case they become relevant.

The next step in the development of a database is the method used to store and retrieve the documents in the working set. The traditional way is to store hardcopies in notebooks in numerical order and put the notebooks on shelves in the document repository. The latest method of storing and retrieving documents is imaging, or scanning the documents onto disks. The image produced by the computer on a screen or by a printer is an exact reproduction of the original document, including all notations or other marginalia. Imaging eliminates storage problems. Its disadvantage is that it is more expensive than photocopying. Its advantage is decreased storage space and greater efficiency. As technology improves, the cost of imaging should become cheaper.

The final step is to index the documents for later retrieval. Indexing can be done either by computer or manually. ${ }^{485}$ The index should contain fields that identify the issues, the individuals, and the events and transactions that are important to the case. Indexing involves objective and subjective coding. The coding sheet used by the coder for objective coding typically contains the following fields of information. ${ }^{486}$

[^76]- Document Number. These are the Bates numbers stamped on the first and last page of the document. If the document is one page, only one number is used.
- Date of the document.
- Author.
- Recipient.
- Persons mentioned in the document text.
- Carbon copy recipients.
- Document type (letter, memo, diary, etc.).
- Coder.

The coding sheet may also contain fields that relate to the interpretation of a document and its relevance to the case. This involves subjective coding and may include the following fields:

- Issue(s).
- Priority (routine; hot, i.e., extremely important to the case).
- Privileged. This should identify the type of privilege involved, attorney-client, and work-product. This is useful in responding to an interrogatory asking about documents that have been withheld from production to opposing counsel and the basis for the privilege.
- Summary. This section allows the reviewer to make an abstract or summary of the document. Generally, use of this field is discouraged since the attorney will read the document. Thus, a summary in view of the time and expense to make it is usually not worthwhile.

Caution should be taken not to use too many codes, particularly issue codes. If the database becomes too complicated, it will be difficult to work with and may even fail. Access to the computer should be limited to only those who have been given passwords. Subjective coding should be done by personnel who are knowledgeable about the case and the issues.

Optical Character Recognition (OCR) is another technological feature that can be used for document control. This process can be used with documents that contain a substantial number of pages. Although each page is imaged, OCR reviews only those pages that relate to a certain subject or a particular item. OCR allows the computer to locate the specific information within the document and make it readily available for review. Once the information is coded and stored in a computer database, the system will search, sort, and provide specific information. The system can search large volumes of information in a very short period of time. It can list all documents a particular person authorized or received regarding a certain topic during a particular time frame. This is very helpful in preparing a person for his or her deposition. The computer has a perfect memory. It can access any information stored in the system. If used properly, the computer can be a great tool; if used improperly, it can be a disaster. Thus, certain things should be carefully considered before creating a litigation support system. They include:

- What information will you want from the computer system? The information the computer provides is only as good as the information given it.
- How much will the system cost? Is the cost justified in light of what is involved in the case?
- Should the claims consultant manage the documents? If not, is the agency's system compatible with any system that the consultant may be using?

Control and management of the opponent's documents involves the same process used to manage your own documents. However, there are some things that should be kept in mind. If your opponent will be numbering its documents, try to agree on a numbering sequence that does not conflict with your numbering system. If your opponent does not intend to number its documents, request permission to number them when they are reviewed. Numbering the documents is a good way of keeping track of whether all documents are produced. Review the production of the opponent's documents carefully to determine whether any documents are withheld. If you are not permitted to number the documents, make an inventory of what was reviewed. This can be done with a dictating machine. If the agency and the contractor have the same document in their files, do not treat them as duplicates. Both should be put in the database. The Bates number will identify the source of the document. ${ }^{487}$ Fields can be added to the database that relate specifically to the opponent's documents, such as the date it was produced, and whether it was part of an original production or identified in an interrogatory answer and then later produced.

The time, effort, and money spent in developing the database is wasted if the information contained in the database cannot be retrieved quickly. It is important to design the system correctly. Redesigning the system or trying to patch it up later with bandaids can be expensive and delay trial preparation.

When the records of the contractor or any adverse party are made available for inspection, they should be copied rather than simply inspected. It is often difficult to determine, in a quick inspection, the significance of a particular document. Documents that may have appeared insignificant earlier may become significant as more information is developed about the case. Technical assistance may be obtained from consultants about the types of documents that should be inspected. This information should be included in the litigation plan. This plan should list each claim, the information needed from the contractor to analyze the claim, the methodology that will be used to analyze the claim, the estimated number of hours that are needed to perform the analysis, the priority given to the task, and whether the documents have been produced. The information can be shown in a spread sheet format as follows:

[^77]| Claim | Analysis | Estimate of <br> Hours | Priority | Documents <br> Required | Documents <br> Produced |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Home Office <br> Overhead | 1. Analyze General <br> Ledger Cost Data | 100 | High | 1. General <br> Ledger | 1. Yes |
|  | 2. Analyze Home Of- <br> fice Overhead Costs <br> and Make Adjustments <br> for Costs That are Not <br> Time Related or Do Not <br> Correspond to the <br> Claimed Delay Period |  | 2. Contrac- <br> tor's Explanation <br> of Corporate <br> Overhead Alloca- <br> tions in Claimed <br> Overhead Pool | 2. No |  |
|  | 3. Prepare a Revised <br> Home Office Overhead <br> Rate Per Calendar Day <br> to be Applied to Allow- <br> able Delay Days |  |  | 3. Inquiries to <br> Contractor about <br> Certain Costs. | 3. No |

Counsel should try to obtain documents from the opposing party and from third parties by agreement. Counsel should seek advice from the retained consultants in identifying documents that should be sought. The experts will use the right nomenclature in identifying documents, avoiding disputes over what is being requested. Counsel should insist that all documents withheld under a claim of privilege be identified together with the basis for the privilege. If opposing counsel refuses, this information can be obtained by interrogatories. Whether the privilege is valid or not can be tested by a motion to compel production of the document and, if necessary, by an in camera inspection of the document by the court. ${ }^{488}$ Counsel for the owner should also arrange, if possible, for the financial experts to review the contractor's cost records. Similar arrangements should be made with subcontractors who have pass-through claims. Once informal discovery is exhausted, formal discovery should begin.

## c. Photographic and Video Evidence

Photographs and videos can be highly persuasive evidence in construction claims litigation if the circumstances under which they are created are documented carefully and if care is taken to obtain and provide authenticating evidence when seeking their introduction as evidence.

Comparison among photographs taken during various stages of a construction project, including aerial photos taken on a regular basis, may be useful in demonstrating progress or lack of same on the project. Photos showing equipment breakdowns can also be significant in explaining lack of progress. Videos should be taken when the video will document particular problems. Photos and videos should always be dated.

If a state DOT has reason to suspect possible fraud in the performance of construction work, surveillance videos and photographs taken from concealed locations

[^78]with telephoto lenses may play an important role in evaluating any confidential allegations of fraud, and in revealing and documenting the fraud if it is in fact occurring, and may prove to be essential evidence at the center of any subsequent criminal prosecutions and contract claims litigation. ${ }^{489}$

When state DOTs or the offices of state AGs prepare claims summaries in preparing to litigate a contract claims case, such summaries should include reference to any available and relevant photos and videos, what they show, and who has custody. Information about the photographs and videos will be needed to authenticate them for purposes of introduction into evidence. Such information, if obtainable, should include who took them, what equipment was used to take them, what they portray, when and under what conditions they were taken, where and from what vantage point they were taken, why they were taken, and the background and qualifications of the people who took them, particularly if they were not taken on a routine basis in the
${ }^{489}$ One of the authors of the 2011 update to this volume was involved as an attorney in the investigation of suspected fraud involving the intentional driving of short and defective piles for overpass foundations on NYSDOT's $\$ 100$ million Suffern Interchange project during the early 1990s. That investigation included the collection of extensive photographic and video evidence by investigators from concealed locations, and the comparison of such evidence with construction records and contractor requests for progress payments to identify fraudulent requests for payment. FBI agents and an Assistant U.S. Attorney used video evidence furnished by NYSDOT in questioning one of the defendants in the case, who agreed on the advice of his defense attorney to enter into a plea bargain shortly after they were both confronted with the video evidence and fraudulent payment requests immediately after they denied that any of the construction work had been defective. Both of the authors of the 2011 update of this volume later assisted the Office of the State Attorney General in representation of the State in the multi-year, multi-party, multi-million dollar contract claims litigation that followed the criminal case.
ongoing performance of ordinary construction oversight functions.

If claims litigation is conducted in federal court, photographs, like other types of documents, may be obtained from an adverse party to the lawsuit through a request for production of documents ${ }^{490}$ and from nonparties by a subpoena duces tecum. ${ }^{491}$ Information concerning the contents of photographs, needed to authenticate them for purposes of admission into evidence, may also be sought through interrogatories or requests for written admissions. ${ }^{492}$ Conventional photographic prints have been subject to pretrial discovery for many years. Photographs and videos in electronic form are now also expressly included among electronic documents that are subject to electronic discovery, or "ediscovery," in federal litigation, under the 2006 amendments to FRCP Rules 26(b) and 34. Similar rules may apply at the state level. The topic of e-discovery is discussed further in subsection 6(D)(4), below.

To the extent that information in photographs or videos appears to have potential importance, it may be useful to question witnesses during pretrial depositions regarding the origin and contents of such photos or videos. If the witness being deposed is a potential expert witness, it may be appropriate to inquire what documents and records he or she considered in preparing to testify, and in forming any expert opinion regarding issues in the case; whether such documents and records included photographs and videos (including any specific photographs or videos considered to be potential trial evidence); if so, what significance the expert considered them to have; and if not, why the expert failed to obtain and consider them before forming any expert opinion regarding issues in the case.

In preparing engineering witnesses to testify at trial, it may be useful to show them photographs or videos likely to be offered as evidence, ask what meaning or significance (if any) the engineer attaches to them, and ask what things the engineer sees in them that a person who is not a professional engineer might fail to notice or understand. In addition to possibly eliciting information of which the attorney may previously have been unaware, this may also help the attorney plan which witnesses to use in authenticaticating the photographs and videos as evidence and in explaining their significance to the court.

Attorneys may find it helpful to use photographs and videos, along with other visual aids, during opening statements in litigation to explain and illustrate what the evidence will show. It may be advisable to pre-mark them as exhibits and obtain permission from the court in advance to use them in the opening statement, if opposing counsel refuses to stipulate to their use, in order to avoid any objections that might undercut the effectiveness of the opening statement.

[^79]It is difficult to find any recent reported highway or bridge construction claims cases in which the use of photographic or video evidence was contested successfully, suggesting that state DOTs and the offices of state AGs may have sufficient experience in the collection and use of photographic and video evidence in construction contract claims litigation to use them effectively. There have been some recent decisions in the building construction industry involving such issues, however.

In a 2006 decision by a court in Connecticut, for example, photographs of cracking in concrete, coupled with expert testimony that associated the cracks with a contractor's allowing the concrete to dry too quickly, were among the evidence that led to imposition of damages against the contractor in a construction defect case. ${ }^{493}$

In a comparable 2007 decision by an appellate court in Texas, the court found sufficient evidence in the record to support a jury verdict in favor of a purchaser who had sued a contractor over a construction defect that caused water penetration. The court's decision noted, among other things, that, "As additional evidence of the damage, the Cantus [ed.: one of the parties in the case] introduced photos showing mold growing on sheet rock, doors, ceilings, and trusses. All of these photos were admitted into evidence." ${ }^{494}$

The use of photographic and video evidence is not without some potential problems, however. Counsel must comply in a timely manner to requests by opposing counsel for copies of photographs or videos used in testimony during a deposition in a construction defect case. As shown by a 2006 appellate decision in Mississippi, failure to do so, along with other failures to comply with discovery requests, may result in dismissal of the case with prejudice. ${ }^{495}$

The significance of the photographs or videos must be established by additional evidence connecting them to the issues in the case. As indicated by a 2009 decision by the Court of Appeals of the State of Washington, merely getting photographs of a condition at a construction site into evidence, without obtaining the admission of expert testimony or other testimony establishing a connection between the photographed condition and the conduct of one of the parties or its subcontractors, does not suffice to establish liability. In that case, the trial court had admitted photographs into evidence but had not admitted proffered statements by certain expert witnesses. The appellate court pointed out that "photographs of loose Tyvek on the exterior of the structure, with no expert testimony to explain them, do not estab-

[^80]lish that any of the subcontractors breached their contracts with respect to Tyvek installation." ${ }^{496}$

To be persuasive as evidence, photographs must portray conditions as they were at or shortly after the time of the alleged conditions or incident at issue in the litigation, rather than at some other time when different conditions prevailed. As an Ohio appellate court noted in 2008, in a case involving a vehicular accident allegedly resulting from roadway conditions adjacent to a construction site, "...although plaintiffs presented Henry with photographs of the site entrances, taken sometime after the accident, that showed the construction site to be muddy and filled with tire ruts, Henry noted the ruts depicted in the photos were not present when he worked at the site. Litton likewise testified to the absence of ruts on December 23, stating the photos showed wet ground, not the dry, frozen conditions he encountered at the site."497

Merely photographing defects in construction, especially doing so in a nonsystematic or incomplete manner, will not be considered to excuse performing remedial work without first allowing the contractor allegedly responsible for such defects to inspect them thoroughly before the remedial work is performed. Proceeding with remedial work without first allowing a physical inspection may be considered to constitute spoliation of evidence, a situation in which photographs will not be sufficient to avoid. This is especially true if the complaining party fails to take photographs of all of the allegedly defective work, fails to do so in a systematic or consistent manner, or fails to take photographs of sufficient detail or quality to support the forming of opinions by expert witnesses.

This is the situation that transpired in a New Jersey case decided in 2010. ${ }^{498}$ A commercial building owner sued a construction contractor and a glass installer, alleging that the installation of new windows had been defective and that the windows had leaked. The building owner photographed the allegedly defective window installations but did not do so in a complete or systematic manner, and did not offer the contractor a chance to inspect them before proceeding to carry out repairs on its own. The trial court found that the photographs were insufficient to protect the building owner against a finding of spoliation of evidence and precluded the owner's expert witness from testifying. An intermediate appellate court reversed and remanded, finding that the installer had greater knowledge than the building owner of how the windows had been installed, had many opportunities to inspect them, and merely limited the testimony of the owner's expert to matters estab-

[^81]lished by evidence obtained prior to the removal and replacement of the windows. On further appeal, however, while affirming that decision with regard to the installer, the Supreme Court of New Jersey reversed and remanded with regard to the contractor, finding that the spoliation of evidence had caused such prejudice by depriving the contractor of the opportunity to inspect as to require the complete dismissal of all claims against the contractor. The photographs taken by the building owner before and during the performance of the repairs were not sufficient to save him from this determination.

In accordance with Rule 103(a)(1) of the Federal Rules of Evidence (FRE), any objection to photographic or video evidence, or to its interpretation, must be made on a timely basis at trial. It is too late to do so for the first time when a party is pursuing an appeal. This is illustrated by a federal appellate decision from 2005, involving a dispute between two firms, Crossley Construction and NCI Building Systems. ${ }^{499}$ During trial, counsel for NCI offered in evidence a videotaped deposition of a former NCI employee who represented NCI in early negotiations with Crossley. Counsel for Crossley did not object to its introduction and in fact used excerpts from that videotaped deposition in presenting its own case. The trial court found the videotaped deposition testimony more persuasive than that of witnesses who appeared and testified in person, and found against Crossley. Appealing to the Sixth Circuit from that decision, counsel for Crossley objected for the first time both to the trial court's use of the videotaped testimony and to the conclusions the trial court reached about the credibility of the videotaped testimony as compared with the testimony of witnesses who appeared in person. Counsel requested that, if the Sixth Circuit did not exclude the videotaped testimony from evidence, it conduct a de novo review of the credibility of the videotaped testimony, without granting any deference to the trial court's findings. Citing FRE Rule 103(a)(1), noting that counsel for Crossley had failed to file a timely objection to the videotape and had in fact used excerpts from it, and finding that Crossley's rights were not adversely affected by the trial court's evaluation of the videotaped testimony, the Sixth Circuit precluded Crossley's counsel from raising the objection on appeal.

While parties may on occasion seek to block the disclosure of their own photographs on grounds of privilege as work product created by or for attorneys in preparation for trial, at least one Federal District Court indicated in a 2009 decision that photographs, along with measurements, diagrams, or other factual summaries or reports merely transmitting factual information, are not likely to be treated as privileged by the courts. ${ }^{500}$

[^82]Under FRE Rule 403, while photographs and videotapes made of conditions in the field that are relevant to issues in litigation, or videotapes of witnesses testifying under oath in a pretrial deposition, may well be admitted, videotapes of counsel presenting their own discussions, opinions of, or conclusions about evidence are likely to be rejected by courts as duplicative and cumulative. This is illustrated by a 2005 decision by the U.S. Court of Federal Claims. In that case, which involved a contractor's contractual duty to provide the U.S. Army Corps of Engineers with design services without negligence and whether a contract calling generally for use of a preengineered metal building absolved the contractor of any responsibility for the design of the building, the evidence offered by the contractor's counsel included a 4-minute video on a disc of counsel explaining how another exhibit, a model of a building frame, had been used to address certain engineering issues at trial. Government counsel opposed its introduction on the ground that counsel's arguments did not constitute evidence, that the videotape was slanted toward the contractor's version of the case, and that government counsel had been denied the right to cross-examine. Noting that all of the matters described in the video had previously been addressed by testimony given in person by witnesses who appeared at the trial of the case, the court denied the contractor's motion for admission of the video on the grounds that under FRE Rule 403, even relevant evidence may be excluded on the grounds of needless presentation of cumulative evidence. ${ }^{501}$

## 4. Electronic Discovery: Federal and State Provisions, E-Discovery Software, and Practice

Pretrial discovery has been a significant part of transportation construction contract claims litigation for many years. Claims litigation, like other litigation, can be won or lost during the discovery phase. The party who can locate, analyze, store, and retrieve communications, documents, and records relevant and material to contested issues the most quickly, fully, and efficiently has a decided edge in being able to organize and present its case clearly and persuasively, and in preparing to defend itself against any evidence adverse to its interests.

Since 2006, pretrial discovery in contract claims litigation, as in other forms of litigation, has been revolutionized by the advent of electronic discovery, or "ediscovery," which has outstripped (though not totally supplanted) traditional discovery of paper documents. This is due to major and accelerating changes in the way that government transportation agencies and construction contractors communicate, generate, and maintain records; to changes in the rules governing litigation; and to changes in the professional practices, skills, and equipment of attorneys engaged in such litigation. To some extent, e-discovery has become a specialized

[^83]area of legal practice, as attorneys equipped with the necessary tools and skills have, all other things being equal, a strong advantage over adversaries who have failed to acquire them. State DOTs, state AG offices, and private sector law firms cannot have any reasonable expectation of being effective in litigating construction claims cases without equipping themselves with the necessary computer hardware, software, and staff training to handle e-discovery in a timely and efficient manner.

Since developments at the federal level have led the way in this field and have been highly influential, the discussion that follows will focus on federal law. While offering some examples from selected state law, this discussion does not attempt to provide a systematic or thorough survey of state law in this area. Practitioners will have to research such matters further for the jurisdictions they regularly litigate in. In doing so, they may find participation in the Sedona Conference to be helpful. ${ }^{502}$

## a. Revolutionary Impact of 2006 Amendments to Federal Rules of Civil Procedure

In certain regards, the fundamental rules of discovery have not changed greatly, and e-discovery may be seen as the proverbial old wine in new bottles. Subject to claims of legal privilege, parties have always had an obligation to instruct their personnel to preserve records of matters involved or foreseeably about to become involved in litigation and to produce relevant and nonprivileged records to opposing counsel on demand under statutes, regulations, and case law governing pretrial discovery in litigation. For almost 300 years now, Anglo-American courts have also recognized that, if a party fails to preserve or produce documentary evidence that is relevant and material to the determination of contested issues in litigation, and if it is that party's fault that such evidence is missing, the court may draw an adverse inference from the missing evidence and presume that it would have been favorable to the other party. ${ }^{503}$

[^84]During the past 20 or 30 years, however, the increasingly widespread availability of computers, software, the Internet, email, and other aspects of electronic communications and information storage and retrieval systems have thoroughly transformed the ways in which state DOTs, consultant engineers, and construction contractors communicate, design projects, and let, award, and administer construction contracts. Where communications used to involve letters, memoranda, and telephone calls, they are now increasingly handled through email and through electronic preparation and transmission of maps, engineering plans, specifications, bids, contracts, construction inspection reports, payment vouchers, and other records typically generated and maintained during the performance and after the completion of construction projects.

While initially slow to recognize or deal with this, federal and state legal systems and courts have definitely caught up. The rules for litigating civil cases in federal civilian courts are set by the FRCP. In 2006, significant amendments updated the FRCP rules to recognize and make express provision for e-discovery. Many states have since adopted comparable revisions to state laws governing civil procedure in state courts. For the past several years, these new rules have been mandatory and binding on parties, attorneys, and courts, including those involved in construction contract litigation. They are compulsory, rather than advisory, and parties and attorneys who fail to comply with them can be severely penalized by the courts.

Key provisions are found in Rules 26, 34, and 37 of the FRCP. Amended extensively in 2006, these now make express provision for the discovery of electronically stored information (ESI), as well as paper communications, documents, and records. Sufficient time has passed since the amendments went into effect for a body of case law interpreting them to have begun emerging.

The assembly, disclosure, and production of ESI as well as paper records in federal civil litigation is governed by FRCP Rule 34, Producing Documents, Electronically Stored Information, and Tangible Things, or Entering onto Land, for Inspection and Other Purposes. Broader requirements to preserve, disclose, and produce ESI and paper records in discovery are set forth in FRCP Rule 26, Duty to Disclose; General Provisions Governing Discovery, specifically including but not limited to Rule 26(b), Discovery Scope and Limits, and Rule 26(b)(2)(B), Electronically Stored Information. Penalties and consequences for failure to comply with Rules 34 and 26 are set forth in FRCP Rule 37, Failure to Make Disclosures or to Cooperate in Discovery; Sanctions. These amended rules, and the case law interpreting them, represent a marked departure in significant respects from prior law governing paper records.
U.S. 127, 43 S. Ct. 16, 67 L. Ed. 167 (1922), Confederated Tribes v. United States, 248 F.3d 1365 (Fed. Cir. 2001), Kronisch v. United States, 150 F.3d 112 (1998).

## b. Discovery of Electronically Stored Information

The basic requirement for discovery of ESI is set forth in FRCP Rule $34 .{ }^{504}$ In addition to seeking the production of printed or written records, tangible things, or entry and inspection of land or other property, a party in federal litigation may, under Rule 26(b), request any other party to produce and allow the requesting party to inspect, copy, test, or sample items within the responding party's possession, custody, or control, specifically including "any designated...electronically stored information-including writings, drawings, graphs, charts, photographs, sound recordings, images, and other data or data compila-tions-stored in any medium from which information can be obtained either directly or, if necessary, after translation by the responding party into a reasonably usable form. ${ }^{505}$

The request must describe each item or category of items to be inspected with reasonable particularity; must specify a reasonable time, place, and manner for production; and "may specify the form or forms in which electronically stored information is to be produced. ${ }^{506}$

The party to whom the request is directed has 30 days after being served to respond in writing, unless a shorter or longer time is stipulated to or ordered by the court. ${ }^{507}$ The response must, for each item or category, indicate that inspection will be allowed or set forth an objection, including the reasons for the objection. ${ }^{508}$ If an objection is directed to only part of a request, it must specify the part which is objected to, and allow discovery of the rest. ${ }^{509}$

Where the request is for production of ESI, the response may object to the requested form for producing the ESI, and if such an objection is made or if the request failed to specify any particular form, the response must state the form or forms it intends to use. ${ }^{510}$ The following requirements all apply to responses to requests for ESI, unless otherwise stipulated by the parties or ordered by the court. ${ }^{511}$ The responding party must either produce ESI documents as they are kept in the usual course of business or must organize and label them to correspond to the categories set forth in the request. ${ }^{512}$ If the request fails to specify a form in which to produce ESI, the responding party must either produce it in a form in which it is ordinarily maintained or

[^85]in a reasonably usable form or forms. ${ }^{513}$ The responding party need not, however, produce the ESI in more than one form. ${ }^{514}$ Nonparties may also be compelled to produce documents and tangible things or to permit inspections under FRCP Rule $45 .{ }^{515}$

As a matter of practice, it is crucial for state counsel, a state DOT, or another party framing or responding to a pretrial discovery request for ESI to determine in advance what computer hardware, what e-discovery software program or programs, and/or what e-discovery external services they will be using to access and analyze the ESI they are requesting another party to produce; to determine in advance what electronic media and file format or formats such hardware and software can access and analyze effectively; and what the consequences of a choice between formats may be, both in terms of feasibility and effectiveness of access and analysis and in terms of financial costs.

As discussed below, there are a variety of competing commercial products in the market for e-discovery software and services, with a considerable variety of tradeoffs in terms of costs, ease of use, and effectiveness. A choice between different e-discovery software or services may result in a difference in the hundreds of thousands of dollars in the costs of conducting ediscovery. While the connection between cost and effectiveness is not always direct or uniform, in many cases it is true that although inexpensive e-discovery software is available, it is not easy or flexible to use and does not deliver very useful results. Some other software programs or services are far more intuitive, easier, and more flexible to use, and produce far more effective results, but are considerably more expensive. Far too often, the choice appears to be made based on a budget-driven evaluation of the initial acquisition costs of the hardware, software, and/or services involved, rather than on a realistic evaluation of its usability and effectiveness and the financial consequences of losing a major contract claims case due to inadequate ediscovery capability.

The differences among different e-discovery software, and the weaknesses of some lower-cost software, may not become fully apparent until counsel attempt to perform privilege reviews of large quantities of electronically stored information, to prepare privilege logs identifying privileged electronic documents and setting forth the legal reasons for withholding them, and to prepare redacted copies of electronic documents where privileged portions may be withheld and the remaining portions of the documents may be produced. Glaring deficiencies in some software may not become evident until counsel is in the midst of such efforts, but by then it may be too late to switch to (and learn how to use) more effective software in time to comply with courtimposed discovery deadlines in the litigation.

[^86]As a practical matter, such issues may be of particular concern because of differences in the way clients deal with paper and electronic records. A written memorandum to or from an attorney, with a header marked "privileged and confidential attorney-client communication," may, if transmitted in printed rather than electronic form, receive sufficiently careful handling to sustain the attorney-client privilege. Such a memorandum emailed as an attachment, however, or (worse) as an email message to or from counsel regarding privileged matters, may without much thought be electronically forwarded to persons outside the scope of the privilege, thus destroying the attorney-client privilege for highly sensitive communications and forcing the subsequent disclosure of such communications during e-discovery.

It should also be noted that people who tend to be professional, cautious, and careful in the preparation of written documents, such as letters or memoranda, may be much more casual, informal, and careless in composing and sending electronic messages. Email messages containing candid acknowledgments of problems, frank discussions of conflicts between personnel, language dominated by slang or profanity, or communications of a personal nature with individuals other than a spouse, can prove to be particularly embarrassing in ediscovery, but there is no rule protecting embarrassing as opposed to legally privileged electronic information from mandatory disclosure during e-discovery.

## c. Timing, Scope, and Form of Electronic Discovery: Issues of Undue Burden, Cost, and Privilege; Protective Orders

Like other forms of pretrial discovery, the discovery of ESI in federal litigation is, in addition to FRCP Rule 34, subject to the general provisions of FRCP Rule 26. This rule has evolved and grown over time and is now highly complex and many pages long. It would go beyond the scope of the current volume to discuss all the provisions of Rule 26, and the current discussion must of necessity be a selective one focusing on provisions likely to affect discovery of ESI in claims litigation.

FRCP Rule 26 requires the attorneys of record for the parties to convene a pretrial discovery conference as soon as practical after commencement of the case and no less than 21 days before a scheduling conference is held or a scheduling order is due under FRCP Rule 16. ${ }^{516}$ They must make certain mandatory disclosures (discussed below), attempt in good faith to agree on a proposed discovery plan, and submit it to the court in writing within 14 days after the conference. ${ }^{517}$ The discovery plan must state the parties' views and proposals on a variety of discovery issues, including whether there should be any changes in requirements for mandatory disclosures; the subjects on which discovery may

[^87]be needed, when it should be completed, and whether it should be conducted in phases or focused on particular issues; any issues about claims of privilege, including whether the parties are willing to agree to a "claw-back" arrangement providing procedures for asserting claims of privilege after documents are produced; and whether the parties consider it necessary to ask the court for issuance of a protective order on such issues. ${ }^{518}$ The discovery plan is expressly required to address "any issues about disclosure or discovery of electronically stored information, including the form or forms in which it should be produced."519

Within 14 days after the pretrial discovery conference, unless otherwise stipulated or ordered, the parties must make certain mandatory disclosures to each other, even in the absence of specific discovery requests or demands. Such mandatory disclosures include the names of individuals likely to have discoverable information that the parties may use to support their claims or defenses, computations of each category of damages claimed by the parties, and any insurance policies that might cover any liabilities in the case. They also include providing either copies, or descriptions by category and location, of the evidence that the parties have and may use to support their claims or defenses, specifically including but not limited to ESI. ${ }^{520}$

Mandatory disclosures must be in writing, signed, and served. ${ }^{521}$ Pretrial discovery must be completed at least 30 days before trial. ${ }^{522}$ Parties that have made mandatory disclosures or responded to discovery requests are under an ongoing responsibility to supplement their prior disclosures if they learn that such disclosures have been materially inaccurate or incomplete. ${ }^{523}$ By signing mandatory disclosures, discovery requests, and responses to discovery requests, the attorneys of record for the parties certify that, to the best of their knowledge, information, and belief formed after reasonable inquiry, their discovery requests are legitimate under the rules and not intended for purposes of harassment, delay, or increasing the costs of opposing parties; their requests are neither unreasonable nor unduly burdensome or expensive to comply with; and their disclosures and responses are complete and correct as of the time when made. ${ }^{524}$

The scope of discovery in federal litigation is generally quite broad, extending to "any nonprivileged matter that is relevant to any party's claim or defense." For cause, the court may order discovery not only of admissible evidence, but also of any relevant information "reasonably calculated to lead to the discovery of admis-

[^88]sible evidence." ${ }^{525}$ The court may, however, limit the frequency or extent of discovery if the discovery sought is unreasonably cumulative or duplicative; can be obtained from another source with greater convenience and less burden and cost; or the burden or cost of discovery outweighs its likely benefit considering certain enumerated factors. ${ }^{526}$

Rule 26 includes provisions placing limitations on the discovery of ESI. In particular, a party "need not provide discovery of electronically stored information from sources that the party identifies as not reasonably accessible because of undue burden or cost." Upon a motion by the requesting party to compel discovery, or by the responding party for a protective order, the responding party bears the burden of proving that such sources are not reasonably accessible based on undue burden or cost. Even if such a showing is made, however, the court may order discovery to be made, although the court may specify conditions for such discovery. ${ }^{527}$

A party responding to a discovery request, including a request for ESI, may withhold otherwise discoverable information from disclosure based on a claim of privilege or protection as trial-preparation material. If and when doing so, the party claiming privilege must expressly assert the claim of privilege; describe the nature of the documents, communications, or tangible things not produced or disclosed; and do so in a manner that, without revealing privileged information, will allow the other parties to assess the claim of privilege. ${ }^{528}$ If a responding party notifies a requesting party that ESI or other records already produced are privileged, the requesting party must promptly return, sequester, or destroy the privileged material and any copies it has, may not use or disclose the information until the claim of privilege is resolved, and may promptly present the information to the court under seal for a determination of the claim of privilege. ${ }^{529}$

A responding party that has been unable to resolve a discovery dispute with a requesting party may move for a protective order in the court where the action is pending. The moving party must certify that the movant has attempted in good faith to confer with the other parties and resolve the dispute without court action. For good cause shown, the court may issue an order protecting a party or person from "annoyance, embarrassment, oppression, or undue burden or expense." The court may, in such an order, forbid the disclosure or discovery, impose terms on the disclosure or discovery; prescribe a discovery method other than the one sought, forbid inquiry into certain matters or limit the scope of disclosure or discovery to certain matters, protect trade secrets or comparable commercial information, or require that the parties simultaneously file specified documents

[^89]or information in sealed envelopes, to be opened as the court directs. ${ }^{530}$ The party seeking the protective order may also request attorneys' fees and other expenses. ${ }^{531}$

## d. Sanctions for Failure to Disclose or Cooperate ${ }^{532}$

State DOTs maintain a wide variety of ESI that may be the subject of pretrial discovery demands in highway or bridge construction contract information. Such records may include, but not be limited to, CADD or other electronic records concerning the engineering design of the project; electronically stored engineers' estimates of project costs; electronic records related to the letting and award of the contract; electronic records concerning construction administration, including subcontractor approvals, DBE utilization, engineers' diaries, inspectors' daily reports, the review and approval of progress payments, and orders on contract (change orders); fiscal records on the funding of the project; accounting records concerning payments made to contractors and funds remaining available in state accounts for the project; and general correspondence.

State DOT information technology (IT) systems have typically not been designed, however, with implementation of litigation hold (records preservation) orders and retrieval and production of large quantities of ESI in mind. Candor also requires acknowledging that, due to fiscal constraints, the IT hardware, operating systems, and software of state DOTs are in many cases badly outdated. Many components of state DOT IT systems have been developed for different purposes by different units at different times, are not fully integrated, and are not readily accessible to people other than IT staff or personnel of the units that developed them.

One of the most challenging aspects of electronic discovery for state DOTs involved in claims litigation may be the retrieval, assembly, copying, and production of email communications sent and received during the relevant time periods by the various engineers, managers, and staff members who have been involved with the design, estimating, funding, letting, award, construction, payment processing, and miscellaneous administration of the project. While email systems were originally envisioned as a method of quickly transmitting brief, temporary messages, they have evolved in actual use into systems that have largely, if not completely, replaced communications that used to be handled by paper memoranda and correspondence. Most email systems were never designed, however, to retain, store, manage, and retrieve large volumes of communications on a long-term basis. Some email systems limit the duration of time for which emails may be kept or the quantity of emails that individual users may keep. Few email systems have been designed with built-in capa-

[^90]bilities to retrieve simultaneously the email communications of multiple users, sort and screen such emails for communications on specific projects or topics, and download electronic copies of such communications onto electronic media that can readily be provided to the Assistant State AGs representing state DOTs in construction claims litigation or to opposing counsel representing contractors suing for damages.

In many state DOTs, IT personnel are ignorant of the legal requirements for pretrial discovery of ESI in construction claims litigation. Within the internal chains of command of state DOTs, IT personnel typically report to fiscal or business managers, rather than to attorneys or engineers, and they are often less than fully responsive to requests for assistance with responding to pretrial discovery demands for ESI, especially once they become aware of the scope, magnitude, and volume of the discovery demands the agency has been confronted with.

For these reasons, e-discovery, the pretrial discovery of ESI, can be a considerable headache for Assistant State AGs and state DOT attorneys or personnel confronted with pretrial discovery demands. Simply ignoring or disregarding such demands can be a serious mistake, however.

In federal litigation, failure to make disclosures or to cooperate in discovery is subject to sanctions under FRCP Rule 37. This rule includes an important provision relating to ESI. FRCP Rule 37(e) provides expressly that, "Absent exceptional circumstances, a court may not impose sanctions under these rules on a party for failing to provide electronically stored information lost as a result of the routine, good-faith operation of an electronic information system."

Should circumstances indicate, however, that failure to produce ESI has resulted from a cause other than a loss occurring in the routine, good-faith operation of an electronic information system, the penalties under Rule 37 can be substantial. If a responding party fails to make disclosure, the party will be precluded from using the nondisclosed material as evidence in support of any motions or during the trial. ${ }^{533}$ The requesting party may file a motion for an order to compel disclosure or discovery and seek to recover attorneys' fees and other costs for having to do so. ${ }^{534}$ If the responding party fails to comply with a court order requiring disclosure, the court has authority and discretion to issue a further order, which may include the following: directing that the matters involved in the order be taken as established for purposes of the litigation; prohibiting the disobedient party from supporting or opposing designated claims or defenses, or from introducing designated matters in evidence; striking pleadings in whole or in part; staying further proceedings until the order is obeyed; dismissing the action or proceeding in whole or in part; rendering a default judgment against the disobedient

[^91]party; or treating the failure to comply as a contempt of court. ${ }^{535}$ The court may also order the disobedient party to pay the requesting party's attorneys' fees and expenses. ${ }^{536}$

Federal district and circuit courts have taken somewhat varying approaches to the application of these provisions but have made it clear that significant sanctions will be imposed in appropriate cases.

In one noted case with a complex procedural history, the U.S. District Court for the Southern District of New York and the U.S. Court of Appeals for the Second Circuit indicated that parties are under a duty to issue litigation holds preventing the destruction or loss of evidence including ESI; that a plaintiff's failure to issue such an order constitutes gross negligence per se and that late issuance constitutes negligence per se; that gross negligence is sanctionable through permissive adverse inference, and mere negligence is also sanctionable through monetary sanctions; and that an offending party may be ordered by a court to search through its backup tapes at its own cost. ${ }^{537}$ The ruling in that case makes it clear that taking affirmative preventive measures is highly advisable to avoid risk of sanctions under Rule 37.

Taking a somewhat different approach, in another case with a complex procedural history, the U.S. District Court for the Southern District of Mississippi and the U.S. Court of Appeals for the Fifth Circuit indicated that they consider the intentional destruction of ESI to give rise to permissive adverse inferences and the imposition of attorneys' fees and costs. ${ }^{538}$

## e. Proposals to Amend the FRCP, and Local Supplemental Rules

The 2006 FRCP amendments on e-discovery have been criticized for, among other things, establishing a current protocol for the preservation of electronic records, which is allegedly inconsistent from jurisdiction to jurisdiction, and being imprecise in terms of triggering events, scope, duration, and manner of preservation; radical in its approach; unjustified by evidence of need; unbalanced as between plaintiffs and defendants;

[^92]expensive to comply with; and a source of ancillary litigation. ${ }^{539}$ Critics point to cases such as a 2011 decision by a federal magistrate judge to deny a motion by an accounting firm for a protective order to reduce the scope and/or shift some of the cost of preserving 2,500 individual computer hard drives at a cost of more than $\$ 1.5$ million. ${ }^{540}$ This has led some groups, including the Judicial Conference Advisory Committee on Rules, Practice and Procedure, to consider proposing an amendment to the FRCP e-discovery rules to address perceived problems with the existing records preservation requirements. ${ }^{541}$

Some individual federal courts have issued their own local rules to address e-discovery issues to address proportionality and reasonableness standards with regard to preservation, identification, and production of ESI under the 2006 FRCP amendments. ${ }^{542}$

## f. The Roles and Responsibilities of State DOT Counsel, IT Staff, and State Attorneys General

State DOT counsel and IT staff members, and more broadly state DOT officials responsible for the creation, retention, and disposition of agency records, have three broad areas of responsibility for which they and the state DOTs they work for can be held legally accountable.

They have a baseline responsibility to develop, adopt, and implement legally defensible document retention and disposition policies that make express and specific written provision for the generation, length of retention, and disposition of state DOT written and electronic records in the normal course of business. Unless they have such policies in place, any discarding or destruction of written or electronic records relating to construction projects, even if done in the normal course of business prior to the commencement of any litigation, may later be considered by a court to have been intentional destruction of records to prevent their discovery, leading to the drawing of adverse inferences and the imposition of significant financial or other penalties during subsequent contract claims litigation.

Such document retention and disposition policies must include express, specific, and detailed provisions

[^93]governing the retention and disposition of email in the normal course of business. The term "electronically stored information," as used by the FRCP and by courts interpreting pretrial discovery rules, very clearly includes email communications, the scheduling of meetings via electronic calendars, and the like, just as much as engineering plans and bidding documents in electronic form or business records in the form of spreadsheet or word processing data files. Being unable to retrieve or produce emails relevant to a construction project during contract claims litigation, and having no standard records retention and disposition policy to document how long emails are retained and how soon they are disposed of in the normal course of business, would place a state DOT and its officials at serious risk of incurring significant penalties for violating discovery rules in contract claims litigation.

Such document retention and disposition policies must take into consideration any planned changes to the agency's IT infrastructure, including server upgrades, changes in major applications software, and the like. In particular, even if a new IT system is to be implemented, the agency must retain the ability to comply with any pretrial discovery orders requiring the location, assembly and production of records generated and maintained by the old system being replaced.

Any policy calling for the routine disposition or destruction of business records, and particular any policy establishing a short timeframe for the preservation of such records prior to routine disposition, must have an express, clearly stated, written business purpose that will be defensible in court if challenged. In the context of pretrial discovery, assertions by state DOT personnel that "We didn't have enough storage capacity to retain any emails beyond 30 days," or "We didn't have enough money to buy more than a few backup tapes, so we regularly erased and reused them," tend to be viewed in the same category as "The dog ate my homework."

State DOT counsel, IT staff, and officials responsible for agency records also have a responsibility for developing, adopting, and implementing legally defensible procedures for issuing written orders to key personnel once they receive a notice of claim or notice that construction contract litigation has commenced through the filing of a claim or once they even have reasonable grounds to expect that such litigation may occur. At minimum, such a litigation hold procedure must provide for the immediate issuance, transmittal, and confirmed delivery of a written hold order on receipt of a notice of claim, notification of the commencement of litigation, or recognition that circumstances make the occurrence of future construction claims litigation likely. The written hold order must identify (and be delivered to) key officials, agency personnel, and consultants involved in the project or having custody of categories of records concerning the project and related contracts. It must expressly direct them immediately to take affirmative steps to preserve all paper records and ESI concerning the project and any related contracts,
and to protect such records against either accidental or intentional disposition or destruction. It must direct IT managers and staff, other agency records custodians, and consultants involved in the project immediately to cease the routine deletion in the normal course of business of any emails or other paper records or ESI created, sent, or received by such key officials, personnel, and consultants. It must also direct IT managers and staff immediately to preserve, and not to re-use, rerecord, or otherwise dispose of or destroy any and all email or other backup tapes that could be used to retrieve such information in the event of accidental or intentional disposition by individual employees.

State DOT counsel, IT staff, and officials responsible for agency records have a further responsibility to put such litigation hold procedures into immediate effect as soon as a claims case is reasonably anticipated or a notice of claim or perfected claim is received and to cooperate actively with attorneys and investigators from their office or insurance claims counsel in the assembly and transmission of paper and electronic records in connection with pretrial discovery.

State counsel involved in the defense of contract claims litigation have a related but different set of responsibilities. They are responsible for providing general legal advice and guidance to agency lawyers and managers to encourage and to support the development, adoption, and implementation of appropriate, legally defensible records preservation and disposition policies and litigation hold procedures. It must be emphasized, however, that actual compliance with the applicable legal requirements for the preservation, assembly, and production of records in claims litigation remains the obligation of state DOT personnel and that they will not be able to avoid the imposition of sanctions by attempting to shift blame to state counsel if they ignore or intentionally disobey such legal requirements.

## g. Specialized Software for E-Discovery

The need to assembly large quantities of ESI in pretrial discovery, search through such ESI to locate relevant records, identify and redact any records subject to privilege, and the like has given rise to the development of a number of competing private sector e-discovery software programs and services for lawyers. Such programs vary considerably in cost, capability, and performance. Without making or implying any commercial endorsement, such programs include, for example, Clearwell, Kroll Ontrack (Verve SaaS), D4 eDiscovery (Relativity), Concordance, ZyLAB, eDiscovery Tools, Digital Reef, Iron Mountain (NearPoint), CaseCentral, Discovery Assistant, FTI Technology (Acuity and Ringtail), Breeze Legal Solutions (Breeze eDiscovery Suite), Guidance Software (EnCase eDiscovery), Trial Solutions (OnDemand), Blackstone Discovery, Cataphora, Autonomy (Protect), Access Data (Access Data eDiscovery, Early Case Assessment, Summation, and Discovery Cracker), Equivalent DATA (Needle Finder), Commvault (Simpana), and Recommind (End-to-End
eDiscovery). It would not be appropriate for this volume to offer any opinion on the individual merits of these particular programs or any others, and the software field appears to be subject to rapid ongoing developments and changes. Any state counsel or state DOT seeking to acquire such software should choose very carefully and consider usability, power, and flexibility as well as cost, because the phrases "you get what you pay for" and "caveat emptor" definitely apply to such products. The least expensive products should not be expected to be as easy to use, as functional, or as effective as more expensive products, and the differences among such software may have a significant impact on which party is likely to prevail in litigation.

## h. Development of E-Discovery as a Specialized Area of Litigation Practice

As in other areas of litigation practice, e-discovery requires not only investment in computer hardware, computer software, and related services, but also the use of trained and experienced lawyers to assemble, search through, and evaluate ESI as potential evidence. While lawyers may speak slightingly of "document review" as a function, construction cases can be won and lost during e-discovery and document review. It is thus not surprising that e-discovery is gradually evolving into a specialized area of litigation practice, one with which even many experienced litigators are not fully familiar. It is also not surprising that large private sector law firms representing clients with deep pockets may be able to afford more expensive e-discovery hardware, software, and services than are state counsel and State DOTs able to afford, and may thus have an advantage when it comes to e-discovery. This is all the more reason why government officials involved in the defense of construction claims litigation should devote focused attention to e-discovery in the pretrial phases of litigating such cases.

## 5. Formal Discovery

Aside from depositions, discussed later, the principal discovery methods are interrogatories (written questions to your opponent) and requests for production of documents. Also, requests for admission may be used to narrow issues, eliminate having to offer evidence to prove certain facts, authenticate documents, and establish a foundation for dispositive motions.

## a. Interrogatories

Interrogatories should be carefully drafted. Routine use of form or boilerplate interrogatories should be discouraged. Form interrogatories should be used mainly as a guide in organizing and drafting interrogatories that are tailored to the case. The interrogatories or questions should be simple, easily understood, and in plain English. Technical terms used in the questions should be defined in the definitional section of the preface or introduction to the interrogatories. Compound questions and questions with qualifying subordinate clauses should be avoided. Simple, declaratory sen-
tences should be used. This avoids objections and makes the use of the interrogatories at trial more effective. Each question should be followed by an appropriate space for the answer.

Using numerous subparts for the answers can be confusing. The better practice is to have individual questions and individual spaces for each answer.

The interrogatory set should contain a preface. The preface should provide definitions and instructions that are to be used in answering the questions. Careful preparation of the preface helps reduce objections and may be useful at trial in excluding documents that were not identified in the answers. Thus, a broad, all encompassing definition of the terms "documents" and "identify" will help eliminate an argument about whether an interrogatory called for identification of a particular document or a particular person. ${ }^{543}$

Interrogatories can be used to obtain information about the allegations in a complaint. Each allegation in the complaint can be broken down into a series of questions asking about the facts upon which the allegation is based, the events relating to the allegation, the identity of persons who have knowledge of those facts, the identity of documents containing information about those facts, and the identity of persons who have custody of those documents. ${ }^{544}$

Interrogatories can be used to explore a party's opinions or contentions that relate to facts or the application of law to fact. ${ }^{545}$ Contention interrogatories can be written in different ways. These include: (1) asking the opposing party to state all facts upon which it bases some contention; (2) asking the opposing party to explain how the law applies to the facts; or (3) even asking the opposing party to state the legal basis for its contentions. ${ }^{546}$ A party, however, may be able to defer answering contention interrogatories if the party can show that such interrogatories are more properly answered at or near the end of the pretrial phase of the litigation. ${ }^{547}$ Thus, under some liberal discovery rules, an opponent may be compelled to disclose the legal as well as factual basis for its claims. ${ }^{548}$

Interrogatories can be used to require the opposing party to identify expert witnesses whom it intends to call at trial and the subject matter on which the expert

[^94]is expected to testify. ${ }^{549}$ This information, provided in the answer to the expert witness interrogatory, can be explored in detail when the expert is deposed.

The basic function of interrogatories is to provide facts, identify persons who have knowledge concerning those facts, and identify documents containing information about those facts. They can be used for specific purposes, such as inquiring about whether certain documents have been lost or destroyed and how damages were calculated. But beyond these uses, the effectiveness of interrogatories is limited. This is so for one basic reason: lawyers write the answers to interrogatories, not witnesses. Keeping this limitation in mind, the number of interrogatories that a party can serve is limited by the federal rules and may be similarly limited by state or local court rules as well. ${ }^{550}$ Ordinarily, the limitation on the number of interrogatories that is permitted by rule cannot be avoided through the use of numerous subparts. ${ }^{551}$

When interrogatories are received, they should be promptly reviewed to determine if any are objectionable. In most jurisdictions, failure to serve objections within a specified time period waives the objection. ${ }^{552}$ In addition to specific objections to specific interrogatories, counsel should consider making general objections, as appropriate. The following are some examples of general objections.

- Defendant objects to these Discovery Requests to the extent that they may be construed as calling for information or documents subject to a claim of privilege or otherwise immune from discovery, including, without limitation, information protected by the attorney-client or work-product doctrine.
- Defendant objects to these Discovery Requests to the extent that they seek facts, documents, and/or information already known to plaintiff.

[^95]- Defendant objects to providing confidential or proprietary information or producing documents that contain such information until a properly framed protection order is entered.
- Defendant objects to the "Definitions and Instructions" to the extent that they call for information from individuals or entities over whom the defendant has no control. Defendant further objects to the discovery requests as oppressive, unduly burdensome, and not reasonably calculated to the discovery of admissible evidence.

A common practice for answering questions that are marginally objectionable is to couple the answer with an objection. This does two things: First, it preserves the objection for trial. If the objection is sustained, the answer cannot be used in the trial. ${ }^{553}$ Second, it avoids raising the ire of the court in having to rule before trial on an objection that is marginal.

FRCP 33(d) allows a party to produce its business records in response to an interrogatory when the answer to the interrogatory may be found in the records and "the burden of deriving or ascertaining the answer is substantially the same for the party serving the interrogatory as for the party served." To avoid Rule 33(d) and obtain complete answers, the party serving the interrogatory must show that the burden of deriving the information from the records is heavier on it than on the other party. ${ }^{554}$

## b. Request for Production of Documents

When documents cannot be obtained on a voluntary basis, they may be obtained from a party to the lawsuit through a request for production of documents, ${ }^{555}$ and from nonparties by a subpoena duces tecum. ${ }^{556}$ In requesting documents, a party should try to specify particular categories of documents, rather than a broad request for all documents. Usually, this type of request will be met with a response that documents not privileged will be available for inspection and copying on a certain date and at a certain place during normal business hours.

The request should specify that the documents are to be produced in their original files in the manner in which they are kept. The request should require identification of all documents that are not produced. The request can be accompanied by an interrogatory requiring that for each document not produced, the party must identify: (1) the type of document withheld; (2) the

[^96]date, author, and addressee of the document; (3) the general subject matter of the document; (4) the identity of any persons copied; ${ }^{557}$ and (5) the type of privilege asserted. The privilege can be tested by a motion to compel production of the document.

Information about what to ask for can be obtained from the consultants. In addition, the litigation plan should list the documents that should be obtained. The plan can be updated as documents are obtained, allowing counsel to keep a running record of what has been produced and what still has to be obtained.

## c. Requests for Admissions

Requests for admission require an opponent to admit or deny a particular fact or contention. ${ }^{558}$ Like interrogatories, requests for admission should be simple, straightforward, and clear. Each request should deal with a single fact or contention and be worded so that the response must either admit or deny the fact or contention. ${ }^{559}$ Requests for admission can be used to establish a foundation for a dispositive motion ${ }^{560}$ or a partial summary judgment. ${ }^{561}$ Requests for admission can be used to authenticate documents attached to the request and to establish documents as business records. The contents of writings and photographs may also be proved by written admissions. ${ }^{562}$

Under the FRCP, requests for admission can be used as a discovery device concerning the opposing party's theories. Requests for admission concerning contentions that relate to fact or the application of law to fact are permitted. ${ }^{563}$ Requests that are denied should be followed up with interrogatories asking for the basis of the denial. ${ }^{564}$

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## d. Depositions

Depositions are important in case preparation and trial strategy. Counsel can learn from the witness (lay or expert) what the witness's testimony will be at trial. If the witness changes the testimony at trial from what was said in the deposition, the inconsistent statements can be used to impeach the witness. Depositions are also an opportunity to try and elicit admissions from the opposing party or its managing agents, which can be used at trial as substantive evidence. Preparing for and defending the deposition are equally important. Inadequate witness preparation or failure to protect the witness from unfair or abusive questioning can have serious consequences. Depositions, like most things, have two sides: one side is taking the deposition, the other is defending it.
i. Taking the Deposition.-Depositions can be expensive. The party taking the deposition (the interrogator) usually pays an hourly attendance fee for the court reporter, and if the deposition is ordered, pays in addition a set amount per page for the original and for a copy. ${ }^{565}$ Any party may order the deposition or a copy. ${ }^{566}$ If an expert is being deposed, the party taking the deposition customarily pays for the expert's time at the deposition and the time spent that was reasonably necessary in preparing for the deposition. Travel expenses may be involved if the expert has to travel to the place where the deposition is taken. ${ }^{567}$ Because depositions can be expensive, the first considerations should be: "Why am I taking this deposition?" and "What do I hope to accomplish?" The usual answer is knowledge about what the witness will say at trial and the ability to pin down the witness to a particular story, so that if the testimony at trial varies from that story, the deposition can be used to impeach the witness. But depositions can also be used to learn about potential witnesses, about documents that have not been produced, and about events that may bear on liability or damages. Depositions may be used to perpetuate testimony for use at trial for a witness who will not be able to testify in person. Depositions, under rules similar to FRCP 30(b)(6), also allow a party to obtain information from a representative of an organization concerning particular matters. ${ }^{568}$ Depo-
and interrogatories in a single pleading, because if admissions are not denied within the 30 days allowed for response, they are deemed admitted. See, e.g., FED. R. CIv. P. 36(a). Where the practice of combining them is prohibited, denials can be followed up in a separate set of interrogatories.
${ }^{565}$ Some reporters may waive the appearance fee if the deposition transcript is ordered.
${ }^{566}$ Usually, the party defending the deposition does not order the deposition, but will order a copy of the deposition if it is ordered by the opposing party.
${ }^{567}$ Where both sides have the same number of experts, the parties may agree to pay for their own expert's time and travel costs.
${ }^{568}$ FED. R. CIV. P. 30(b)(6) requires the entity to designate one or more persons to testify about the matters listed in the subpoena.
sitions are the only method of obtaining information from a nonparty who is unwilling to cooperate.

Once the decision to take the deposition is made, the next step is to develop a deposition outline. The outline should focus on the objectives in taking the deposition and be divided into topics, in order of importance. Each topic should identify the points that the interrogator wishes to establish with the witness. Evidentiary gaps that need to be filled in should be highlighted in the outline. Avoid an outline that always proceeds in chronological fashion or that always begins with the witness's educational background and work experience. Consider varying the approach to catch the witness off guard. Avoid questions about facts that have been clearly established in interrogatory answers, unless there is something to be gained by asking about them. Interrogatory sets verified by the deponent should be used to develop facts further, as appropriate. This is especially true in depositions of expert witnesses. The standard interrogatories dealing with the expert's opinions and the facts upon which those opinions are based provide a good segue for detailed questioning about the expert's opinions.

Few depositions in construction cases are conducted without the use of documents. The documents that will be used in a deposition should be arranged to avoid having to shuffle through them during the deposition. One method is to keep each exhibit in a separate labeled folder. The documents can be premarked as exhibits by the court reporter in advance of the deposition, ${ }^{569}$ and each folder can be numbered with the exhibit number and arranged in chronological order. Each folder should contain the exhibit that will be handed to the witness and retained by the court reporter, a courtesy copy for opposing counsel, and a working copy for the interrogator. The exhibit number can be keyed into the deposition outline under the appropriate topic. The interrogator's working copy can contain notes and questions about the document. This allows counsel to focus entirely on the working copy in asking questions, avoiding having to skip back and forth between the outline and the document. This makes the examination smoother and more effective and helps reduce mistakes and confusion.

[^98]Another cost saving device, for out-of-state witnesses or witnesses in other cities, is the use of telephone depositions. Telephone depositions are cost-effective when it is not important to observe the witness's demeanor or to confront the witness face-to-face. Videotaped depositions should be considered when the witness will not be available to testify at trial, and the witness's appearance and demeanor will be impressive. ${ }^{570}$

Usually, the depositions of persons who will be called to testify at trial as experts are deferred until all other discovery has been completed. Scheduling depositions can be done either informally by agreement of counsel, or by an order establishing a discovery schedule. If an order is entered, it should require that the depositions of expert witnesses will be completed by a specific date, and further provide that all experts must formulate the opinions, to which they will testify, prior to the date of their depositions.

The order should also address the situation where the expert changes his or her opinion after having been deposed. The order can provide that if that occurs, the opposing party must be notified of the change, and be allowed to take a supplemental deposition with respect to the changes. The order should also prohibit any further changes in the opinion after a specified date, unless the party can show good cause as to why the change should be allowed.

The attorney should prepare for the expert's deposition by educating himself or herself about the subject matter. Consult your own expert who can educate you in the "basics" of the subject and provide you with questions to ask and why they should be asked. This will prepare you to ask follow-up questions. Talk to other lawyers about their experiences with the witness. Review any articles or other written materials authored by the expert. Review any depositions and trial testimony transcripts that other attorneys have and are willing to share.

Consider the place where the deposition should be held. Usually, the best place to take the expert's deposition is at the expert's office. This allows greater access to the expert's work file and eliminates any excuse by the expert for inadvertently leaving part of the expert's work file back at the office. If the deposition is not held at the expert's office, consider serving a subpoena duces tecum upon the expert to bring the case file to the deposition, including all written instructions, information, and requests that he or she was given relating to the case. ${ }^{571}$ The subpoena duces tecum should also require

[^99]the expert to bring materials of any kind used by the expert, or by anyone who assisted the expert.

The primary purpose in taking the expert's deposition is discovery. A secondary purpose is to impeach the witness when his or her testimony during the trial differs from what was said in the deposition. The statements in the deposition that the expert later contradicts are usually in response to questions furnished by the interrogator's expert. Therefore, it is important to write down questions given to you by your expert and ask them exactly as they are written. Aside from potential impeachment questions, and other questions given to you by your expert, you should ask broad, open-ended questions that are designed to obtain information. The attorney should not worry that the answers may hurt. ${ }^{572}$ It is better to know what the expert will say and address it at trial than to be ambushed. Ask the expert to explain his or her answers as appropriate. Make sure that you have obtained everything that the expert has to say about a particular topic. Leave nothing undiscovered. Keep asking questions until you have exhausted everything connected with the expert's opinion and there is nothing further to discover. Insist on answers. If the expert refuses to answer, call the judge for a ruling by telephone, if possible, or make a record for a motion to compel an answer and for sanctions. ${ }^{573}$ Above all, listen to the answer. Some attorneys, in thinking about the next question, fail to listen carefully to what the expert has said. Failure to listen prevents follow-up questions. Before concluding the deposition, check your outline again to make sure that you covered everything. Bring your expert to the deposition. Check with your expert to see if anything else should be asked.

The deposition of the opposing expert typically includes certain topics. They are:

- Qualifications and resume.
- Prior testimony in other cases and details.
- When was the expert retained and by whom.
- What was the expert asked to do.
- What facts did the expert rely upon.
- Who or what was the source(s) for those facts.
- What documents did the expert review and why.
- Who furnished those documents to the expert.
- What information did the expert obtain from those documents and how did the expert use that information in formulating opinions.

[^100]- Did the expert verify information provided by others and if so, how.
- What is the expert being paid for the work and what has the expert been paid to date (ask to see the expert's invoices for work performed).
- Whether compensation is contingent upon the outcome of the case (the answer is almost always no, but the question should be asked).
- If there is no discovery cutoff order, whether the opinions are final, or what further work the expert plans on doing and why. There should be a follow-up deposition if the opinions are revised.
- Whether assumptions were made in forming opinions and what those assumptions were, why they were made, and how the opinion would be affected if the assumptions were incorrect. ${ }^{574}$
- Whether the expert knows your expert and the opposing expert's opinion of your expert.
- When appropriate, try to narrow the differences between your expert and the opposing expert.
- Ask what the witness did to prepare for the deposition, what materials he or she reviewed, and whom he or she consulted. ${ }^{575}$

The deposition of an opposing expert is an opportunity to learn what the expert will testify to at trial. If the attorney properly takes advantage of the opportunity, the attorney should be prepared for crossexamination and should not be surprised by the testimony.

All depositions should be indexed so that essential points for cross-examination are not overlooked. Usually, indexing is done by a paralegal. However, the attorney who will conduct the cross-examination should review the deposition transcript rather than simply rely on the index.
ii. Defending the Deposition: Preparing Witnesses.The first phase in defending a deposition is to prepare the witness to testify. The level of detail that is necessary depends upon the witness. Expert witnesses who are old hands at testifying need little preparation other than to discuss potential problem areas in their analysis and conclusions and to review any documents that they may be questioned about and any conflicting testimony from other witnesses.

Witnesses who have little or no experience should be thoroughly prepared. Begin by finding out if they have ever had their deposition taken. If they have not been deposed before, explain to them what a deposition is, why it is important, and how it can be used at trial. Also review the mechanics of a deposition, including the

[^101]seating arrangements, the oath taken by the witness, and the role of the court reporter. ${ }^{576}$ An attorney preparing a witness to testify, especially one who has never had the experience of testifying before, should also advise the witness of the standard guidelines for testifying effectively. These include the following:

- Always tell the truth. The witness's most important asset is credibility, the ability to testify and be believed by the court, the attorneys, and any jurors. The witness should plan to leave the witness stand the same way he or she came to it, with his or her credibility intact. Witnesses also testify under oath, and there are potential civil and ciminal penalties for testifying falsely under oath, which is referred to as "perjury." You can never be tripped up by truthful answers. Stick to your answers. An examiner may try to shake your testimony by creating doubt in your own mind about the accuracy or completeness of your answers. Tell your story truthfully and stick to it. Do not concede that you could be wrong or equivocate about your answer.
- Listen carefully to the question. Make sure you understand the question before you answer.
- If you do not know the answer, say so. Never guess, and do not allow opposing counsel to entice you into offering an estimate or approximation. If you guess, or agree to a suggested estimate or approximation, opposing counsel might then be able to undermine your credibility by confronting you with evidence showing that your guess, estimate, or approximation is incorrect, and that you do not know what you are talking about.
- If the question is unclear, say so and ask that it be rephrased. Never interpret the question. It is the examiner's job to ask clear and understandable questions. It is not the witness's responsibility to try to figure out what is being asked.
- Answer only the question that is asked. Do not volunteer information not called for by the question. For example, if you are asked how long have you lived at your current address, say " 10 years" and stop. The answer "10 years" is responsive to the question. Adding, "and before that I lived in New York for 5 years," is not responsive; it volunteers information not called for by the question.
- Provide a factual answer. Do not offer opinions unless you have been called as an expert witness. Do not use descriptive but judgmental or emotional adjectives or adverbs-stick to the facts, and keep it brief.
- Answer as briefly as possible, consistent with providing a truthful and responsive answer to the question that has been asked. If a witness continues talking for a long time, trying to explain the answer, he or she is almost certainly volunteering more information than what the question asked for and perhaps revealing things that help the other side's case. It is not the witness's job to provide the attorney with a free ride or a
${ }^{576}$ SUPLEE \& DONALDSON, supra note 570 § 10.13.
free education. Make the lawyer earn his or her living by having to ask more questions.
- Pay attention to the lawyer's questions, even if they seem to be routine or boring. Sometimes a lawyer may try to catch the witness unaware by asking a series of routine and seemingly unimportant questions to lull the witness into complacency and then asking with the same low-key demeanor a deceptively simple but carefully phrased question honing in on key facts or issues in the case. Sometimes a lawyer may be trying to set the witness up for a question that will distort the facts or issues in the case. If so, the witness should still answer the lawyer's questions honestly, factually, and briefly, and should not give an answer that anticipates the next question or argues with the lawyer. Instead, the witness should simply remain alert and be prepared to respond appropriately if the lawyer asks a misleading or distorted question.
- Maintain a calm and professional demeanor. Never get angry or argue. Take your time and think before you answer. Refer to documents as appropriate, but remember that any document referred to could then be part of the deposition. Do not let opposing counsel get under your skin and make you angry, even if the lawyer is arrogant, condescending, patronizing, insulting, sarcastic, belittling, or obnoxious in questioning you. When lawyers do such things, they are often using an intentional professional tactic designed to make witnesses angry and lose their temper, because when witnesses lose their temper, it undermines their credibility, which is what lawyers intend to achieve when they are deliberately insulting.
- Stop when you have finished your answer and wait for the next question. Some examiners will stare at the witness, creating a pregnant pause that suggests to the witness that the answer is incomplete, as if to say, "Well go on, there must be more." This is nothing more than a tactic; do not fall for it. Even if the silence becomes uncomfortably long, do not blurt out additional information that the question did not ask for. Just sit and wait for the next question.
- Do not make facetious, ironic, sarcastic, or flippant remarks. In particular, never ever say the opposite of what you really believe, with a tone of voice, facial expression, or body language that indicates that you mean something else. The transcript records only your words as printed symbols on a page; it does not record your tone of voice, facial expressions, or body language, and will not reflect the irony. If the case later goes up on appeal, an appellate judge reading the transcript will probably take the words you spoke at face value and think that you meant exactly what you said.
- Do not try to sell your story to the interrogator, no matter how fair or charming he or she may appear.
- Do not talk to your lawyer during depositions unless it is critical, except to ask for a break.
- If you genuinely do not know the answer to a question, say so, but do not pretend lack of memory in an effort to evade a question when you do know the an-
swer. Witnesses are expected to be able to respond to questions in their areas of responsibility. If a witness being questioned about significant matters within the witness's area of direct responsibility repeatedly says, "I do not know," or "I do not recall," it will quickly become obvious to everyone, including the judge, that the witness is being intentionally evasive, and this will severely undermine the witness's credibility.
- The witness may be asked whether his or her testimony was discussed with the attorney defending the deposition. The question is legitimate; however, any inquiry about what was discussed is not, if the witness is the client and discussions are privileged. If the discussions are privileged, the attorney should instruct the witness not to answer. If the interrogator persists, the attorney should stop the deposition and seek a protective order and sanctions.
- Advise the witness that you will tell him or her not to answer only when the question invades a privilege, is harassing, or is clearly not relevant.

An attorney defending a deposition should not be a "potted plant," nor should he or she be an active participant. The attorney defending the deposition should protect the witness from harassment and abuse by the interrogator and protect the record by objecting to improper questions. The defending attorney should not coach the witness or inject himself or herself into the proceedings by making comments to the witness such as, "If you recall," after a question is asked. Someone once said that when a defending attorney speaks, the words should start with, "I object." While this is too restrictive, it does suggest limits to the role of the attorney in defending a deposition.

The following are excerpts from a general federal court order governing depositions in the Western District of Washington. The order exemplifies how depositions should be conducted.
(a) Examination. If there are multiple parties, each side should ordinarily designate one attorney to conduct the main examination of the deponent, and any questioning by other counsel on that side should be limited to matters not previously covered.
(b) Objections. The only objections that should be raised at the deposition are those involving a privilege against disclosure, or some matter that may be remedied if presented at the time (such as the form of the question or the responsiveness of the answer), or that the question seeks information beyond the scope of discovery. Objections on other grounds are unnecessary and should generally be avoided. All objections should be concise and must not suggest answers to, or otherwise coach, the deponent. Argumentative interruptions will not be permitted.
(c) Directions Not to Answer. Directions to the deponent not to answer are improper, except on the ground of privilege or to enable a party or deponent to present a motion to the court or special master for termination of the deposition on the ground that it is being conducted in bad faith or in such a manner as unreasonably to annoy, em-
barrass or oppress the party or the deponent, or for appropriate limitations upon the scope of the deposition (e.g., on the ground that the line of inquiry is not relevant nor reasonably calculated to lead to the discovery of admissible evidence). When a privilege is claimed, the witness should nevertheless answer questions relevant to the existence, extent or waiver of the privilege, such as the date of the communication, who made the statement in question, to whom and in whose presence the statement was made, other persons to whom the statement was made, other persons to whom the contents of the statement have been disclosed, and the general subject matter of the statement.
(d) Responsiveness. Witnesses will be expected to answer all questions directly and without evasion, to the extent of their testimonial knowledge, unless directed by counsel not to answer.
(e) Private Consultation. Private conferences between deponents and their attorneys during the actual taking of the deposition are improper, except for the purpose of determining whether a privilege should be asserted. Unless prohibited by the court for good cause shown, such conferences may, however, be held during normal recesses and adjournments.
(f) Conduct of Examining Counsel. Examining counsel will refrain from asking questions he or she knows to be beyond the legitimate scope of discovery, and from undue repetition.
(g) Courtroom Standard. All counsel and parties should conduct themselves in depositions with the same courtesy and respect for the rules that are required in the courtroom during trial.

## e. Discovery Problems

Discovery is the most abused phase of the litigation process. Responses to discovery requests are, on occasion, used as tactical weapons to delay and even to mislead the opponent. Stonewalling document productions is not unusual. Some say that this type of conduct is endemic to an adversary system that requires lawyers to zealously represent their clients. Others say that such conduct violates the Rules of Professional Conduct and is unethical. It is not the purpose of this section to debate either side. The topic is raised merely to suggest some techniques that may be used to deal with such conduct. If your opponent makes frivolous objections to interrogatories or refuses to produce documents, file a motion to compel answers to the interrogatories and compel production of documents. Ask the court to impose appropriate sanctions, including attorneys' fees caused by your opponent's action or foot dragging. ${ }^{577}$ Judges have no patience for responses that are misleading and contrary to the purposes of discovery. Such conduct "is most damaging to the fairness of the litigation process. ${ }^{578}$

[^102]Another abuse is the tactics of the "Rambo" type lawyer. Counsel should conduct themselves in depositions with the same courtesy and respect for the rules required in the courtroom during trial. ${ }^{579}$ In this sense, the deposition room is an extension of the courtroom. If the rules are not followed and the attorney becomes abusive, adjourn the deposition and seek a protective order and attorney fees. Ask the court to make the attorney personally responsible to pay the fee, not the attorney's client. For significant depositions that could be troublesome, ask the court to appoint a discovery master to preside over the deposition. Schedule a discovery motion before the court for entry of a discovery order like the one discussed earlier. During the motion, ask the court for permission to send to the judge a copy of any deposition in which there is improper conduct by your opponent. Tell the judge that such conduct will be highlighted in the deposition and will be sent to the judge to allow the court to monitor discovery. This only works if the case is preassigned to one judge. The potential for sanctions that this poses will usually prevent or discourage improper or abusive deposition tactics.

There is a natural reluctance to run to the court for help in discovery disputes. Instead, trial lawyers, who are naturally aggressive, have a tendency to slug it out, to fight fire with fire. Unfortunately for the client, this type of response does not work well. It does not produce the information or documents needed to prepare the case. The tendency to respond in kind should be resisted. Help should be sought from the court to resolve serious discovery problems. That is the court's job, and involving the court is the best way to protect your client's interests.

## 6. Preparing the Engineering Witness to Testify

When preparing witnesses to testify at trial, attorneys should provide all of the same standard advice to the witnesses as the advice indicated previously in the discussion about preparing witnesses for depositions. There are some additional factors to take into account, however, when the witness is an engineer.

Generally, witnesses in a construction case consist of project personnel and experts. For the owner, the principal employee witness is usually the project engineer or chief inspector. Occasionally, in cases involving technical engineering issues, the owner may call staff engineers who are experts in a particular field of engineering or call outside technical experts as witnesses.

Although engineers and lawyers may think that they speak the same language, the professional educations

Imposed by Courts on Attorneys Who Abuse the Judicial Process, 44 U. CHI. L. REv. 619 (1977); Note, The Emerging Deterrence Orientation in the Imposition of Discovery Sanctions, 91 HARV. L. REV. 1033 (1978).
${ }^{579}$ M. Frankel, The Search for Truth: An Umpireal View, 123 U. PA. L. REV. 1031 (1975) (attorney's ethical duty to seek the truth even when it does not advance his or her client's interests).
that they receive are quite different, and the professional environments in which they operate and gain their professional experience are based on significantly different assumptions. For these reasons, attorneys and engineers may sometimes have difficulty communicating clearly and effectively with each other. They may also fail to recognize that they are having such difficulty.

Engineers are trained and expected to use precise mathematical techniques to determine answers to questions for which there can only be one correct answer and for which there are no shadings or gradations of meaning. The strength of a bridge beam of a certain dimension, fabricated from a certain specific type of material, can be calculated with precision (assuming that it has been properly fabricated and is a new beam that has not undergone years of corrosion and material fatigue). If placed under a load within its maximum strength, it will bear the load; if it is placed under a load greater than its maximum strength, it will break. Determining the strength of the beam may be quite important, and in complex structures there may be a great many different forces acting upon the beam, which must be accounted for in the calculations, but the question is ultimately capable of a single clear-cut answer. Either the beam is strong enough for its intended use, or it is not, period.

Conditioned by dealing with questions that have clear-cut, precise answers, engineers tend to be confident of their ability to understand things. They recognize that lawyers are uninformed when it comes to engineering matters. They tend to think, however, that because they themselves are intelligent and can read and write English, they can understand legal issues and proceedings clearly and that underneath all the formal procedures, things are really simple and clearcut, with only one right answer.

Lawyers, by contrast, operate primarily with words rather than numbers. Words can have many different shades of meaning or be understood differently by different people. Trials involve situations in which people with conflicting legal, financial, and reputational interests swear under oath to tell the truth, and then give testimony asserting such completely different versions of "the truth" that it appears somebody must be lying. The rules governing trial procedures and the admissibility of evidence are of Byzantine complexity, and frequently susceptible to multiple interpretations. Lawyers are trained to operate in an environment where there are two sides to every story, where many if not all witnesses have some personal interest in the outcome of the case, and where a great deal of money, the survival of a business, or a personal or corporate reputation may be at stake. Witnesses who have an interest in the outcome of a case tend not to answer questions in a straightforward way. Witnesses may tell the truth, but only part of the truth, leaving out the part that might place their financial interests or reputation at risk. Witnesses may pretend to be more forgetful than they
really are, give evasive answers, or intentionally shade the truth somewhat. Witnesses may even intentionally give answers that they know to be flat-out false in order to protect their jobs, financial interests, or reputations.

In legal cases, there are often few clear-cut, black-and-white answers. Instead, the testimony of the witnesses and the other evidence may sometimes involve many different shades of grey, often blending almost imperceptibly into each other, with no clear or readily determinable demarcation between truth and falsehood. A trial puts lawyers in the position of diving into a pool of muddy water, where conflicting testimony and evidence obscures visibility so much that the truth can sometimes be glimpsed through the silt only dimly, if at all. ${ }^{580}$ It is nonetheless a trial lawyer's responsibility and duty to try to persuade the judge to believe that his or her clients are telling the truth, that the opposing party's witnesses are not credible, and that his or her clients deserve to win the case. Lawyers are trained to be skeptical of the accuracy of everything they are told by anybody unless they can verify it independently through other reliable evidence; to recognize that it may never be possible for them to determine with precise certainty exactly what happened in the situation that the parties are suing each other over; and to approach trials by advocating for their client's interests and leaving it up to the court to figure out what the truth is.

A trial is not a process designed to be easy, pleasant, or entertaining for witnesses. It is instead intended to test witnesses and evidence to determine who is telling the truth, and failing that, whose version of the truth is more believable. To draw an admittedly imprecise analogy to the engineering world, courts may be compared to materials laboratories, lawyers to materials engineers, and witnesses to concrete core samples. It is the job of lawyers to test the truthfulness and accuracy of testimony given during a trial by using crossexamination and other methods to place the witnesses under pressure. Lawyers subject engineering witnesses and their testimony to the legal equivalent of tension, compression, torque, high and low temperatures, and other stresses, to determine whether the witnesses are credible. It is the job of engineering witnesses to emerge intact by telling the truth, surviving all of the different testing pressures, and being believed by the court.

Often, engineers who are called to testify have little or no experience as witnesses in a trial. Engineers and lawyers work in professions that are based on different assumptions and have different cultures. This means that lawyers and engineers often have difficulty communicating effectively with each other. If an engineer has never testified in court before, an attorney has only

[^103]a short time to prepare the engineer to function effectively in an environment that the engineer's professional education, training, and experience has not equipped him or her to understand very well, and about which he or she may be overconfident, apprehensive, or both. This does not make the process of preparing an engineering witness for trial especially easy for either the lawyer or the engineer, so patience and good will are indispensable to succeeding.

In preparing the engineer to testify, it is important for the attorney to emphasize that a trial is an adversary proceeding. The engineer must realize that the basic principles and facts that the engineer has regarded as true may be questioned. Engineers inexperienced in the courtroom arena often assume that their role is to dispense the facts to the court, that the court will consider them to be as honest as they themselves do and will believe them, and that the facts will automatically result in a favorable decision. This somewhat naive assumption misperceives the nature of the adversary system of justice. Some engineers may also be apprehensive about the prospect of having to deal with the legal system. If appropriate, it may be helpful for the lawyer to arrange for a visit to the courtroom with the engineer in efforts to ease any discomfort.

The attorney should tell the engineer that the outcome of the case may depend upon the credibility of the engineer's testimony. The attorney must convince the engineer of the importance of his or her role as a credible witness. The attorney should emphasize that the engineer knows more about engineering than the attorney does, or more about what happened on the project than the attorney, since the engineer was there and the attorney was not. The witness must understand that the credibility of his or her testimony may depend more on the witness's demeanor than what the witness says. In answering questions, the witness should talk to the jury and make eye contact with them. Although the answer is important, it is not always the answer itself that determines the outcome of the case. Other factors may influence a jury more, including factors such as the engineer's experience, courtroom demeanor, and overall credibility.

An attorney who has an articulate and perceptive witness has an advantageous position. While these qualities are to some degree individual characteristics, an attorney can help cultivate those qualities in a witness through effective trial preparation. One technique is to have another attorney cross-examine the witness to sharpen those qualities. Another technique is to put the witness through a mock direct and crossexamination that is videotaped. The witness can later view the videotape as part of further trial preparation. Also, a witness will occasionally ask the attorney to furnish the witness with a written list of the questions that will be asked. Whether either of these practices is followed depends upon whether there is an attorneyclient privilege prohibiting the cross-examiner from exploring what was said and done by the attorney and the witness during trial preparation. The better prac-
tice is to put the questions to the witness orally, and not have the witness answer from a written list. Written answers to the questions should never be furnished by the attorney to the witness for obvious practical and ethical reasons. Most of us have heard the horror story of the witness who, while on the witness stand, pulls out a list of questions and answers that were given to the witness by the attorney.

The task of the engineering witness is to persuade the court and jury that the witness's opinions are reasonable and result in the correct solution to the problem, and to do so in plain, nontechnical terms. The engineering expert witness should not rest his or her testimony on harsh technical specifications or strict contract provisions. The witness should understand the underlying policies that the contract provisions serve. Judges and juries will consider and be influenced by those policies in enforcing those provisions, without feeling that the result is harsh or unfair. If the engineer understands the policy behind the technical provision, the witness will be less likely to rely on a mere recital of the provision itself, and will be able to explain it in more understandable terms. Moreover, in most instances there is a valid and salutary purpose to be served by each contract provision, harsh as it may seem. This is particularly true in the case of contracts subject to competitive bidding requirements. ${ }^{581}$ The attorney should ensure that in answering questions, the engineer should consider, as appropriate, the purpose of a particular contract provision and not merely rely on the literal wording of the provision itself.

## 7. Pretrial Strategies and Considerations

## a. Judge or Jury

If the contractor did not file a jury demand, should the agency demand a jury? Often, this may be a difficult question. The decision of whether to try the case to a judge or to a jury may depend upon a variety of considerations. How will the parties be perceived by the jury? Will the owner be regarded as fair and evenhanded in the way it managed the project? Will the contractor appear to be fair in its demands, or opportunistic and overreaching? Who has the equities-Or as one lawyer once put it: who will be perceived as the "bad guy"? Who will the judge be? Is judicial bias a concern? If so, can the agency seek recusal? Is the case more legal than factual? Is the case too complex for a jury? ${ }^{582}$

[^104]These considerations (among others) lead to the ultimate question: From the public owner's standpoint, is it better to try the case to a judge or to a jury?

## b. The Answer and Affirmative Defenses

Traditionally, the answer to the complaint in a construction case will deny the essential allegations in the complaint, placing the dispute at issue. In addition, most answers will contain affirmative defenses. An exhaustive list of potential affirmative defenses is included in the Appendix to this subsection. Failure to plead an affirmative defense may result in a waiver of the defense. ${ }^{583}$ However, wholesale inclusion of affirmative defenses without any factual or legal basis is unwise and may, in some jurisdictions, result in sanctions. ${ }^{584}$ Counsel should thoroughly review and investigate the case to be certain that all appropriate affirmative defenses are included in the answer. If new affirmative defenses are discovered after the answer has been filed, counsel should promptly file a motion to amend the answer to include the new defense or defenses. ${ }^{585}$ Several affirmative defenses often available to the owner in a construction case are failure to file timely notice of the contractor's claim, ${ }^{586}$ finality of the engineer's decision on some aspect of the claim, ${ }^{587}$ and
ground that the case was too complex to be generally comprehensible, was denied); R.O. Lempert, Civil Juries and Complex Cases: Let's Not Rush to Judgment, 80 Mich. L. Rev. 68 (1981); Note, The Right to a Jury Trial in Complex Civil Litigation, 92 HARV. L. REV. 898 (1979).
${ }^{583} 71$ C.J.S. Pleading § 199-200; FED. R. CIV. P. 12.
${ }^{584}$ FED. R. CIV. P. 11.
${ }^{585}$ Another device is a "Notice of Trial Amendment." The notice tells opposing counsel that the attorney for the defendant will move at trial to amend the answer to include the defenses set forth in the notice in the same detail as they would be in the answer. This puts opposing counsel on notice and gives counsel an opportunity to conduct discovery about the defenses before the trial.
${ }^{586}$ A.H.A. Gen. Constr., Inc. v. N.Y. City Housing Auth., supra note 581; see supra § 5.A. 7 and 5.B.4.
${ }^{587}$ Where the engineer has authority to render final decisions regarding contract interpretations, courts will uphold the decision unless it was: (1) arbitrary or capricious; (2) based on clear mistake; (3) unsupported by substantial evidence; or (4) based on an error of law. J. J. Finn Elec. Service, Inc. v. P\&H Gen. Contractors, Inc., 13 Mass. App. Ct. 973, 432 N.E.2d 116, 117 (1982); R.W. Dunteman Co. v. Village of Lombard, 281 Ill. App. 3d 929, 666 N.E.2d 762, 765 (Ill. App. 1996); Main v. Dep't of Highways, 206 Va. 143, 142 S.E.2d 524, 529 (1965); State Highway Dep't v. W. L. Cobb Constr. Co., 111 Ga. App. 822, 143 S.E.2d 500, 504-05 (1965); Ardsley Constr. Co. v. Port Auth. of N.Y. \& N.J., 75 A.D. 2d 760, 427 N.Y.S.2d 814, 815 (1980). The rule is based on the principle that the parties anticipate that differences may arise, and to avoid further disputes agree to make the engineer the arbitrator of such differences. State_Highway Dep't v. MacDougald Constr. Co., 189 Ga. 490, 6 S.E.2d 570, 575 (1939); State v. Martin Bros., 138 Tex. 505, 160 S.W.2d 58, 60 (Tex. 1942). The finality of the engineer's decision has been held to be final and binding only
failure to reserve claims in the acceptance document as required by the contract. ${ }^{588}$

Construction contracts customarily contain provisions that require contractors to provide formal written notice of claims whenever the contractor believes that it is being required to perform extra work beyond the requirements of the contract. The purpose of the notice provision is to alert the agency, at an early date, that the contractor has a claim. Early notice allows the agency to take appropriate action to protect itself.

Where the only issue is the legal effect of the contract language, summary judgment dismissing the claim is appropriate. ${ }^{589}$ Where the claim is limited to the amount reserved in the final contract estimate, an order in limine limiting the claim to the amount reserved is also appropriate. ${ }^{590}$

## c. Pretrial Motions

Pretrial motions may be classified generally as dispositive, partially dispositive, and procedural. A dispositive motion, if granted, disposes of the case. Dispositive motions usually take the form of a motion for summary judgment and are granted only when disposition of the case is not dependent upon any factual determination, and the moving party (the party filing the motion) is entitled to judgment in its favor as a matter of law. ${ }^{591}$ An example is dismissal of a case barred by a statute of limitations. Partial disposition of the case
where the contract expressly conferred authority upon the engineer to make the decision. C.B.I. Na-Con, Inc. v. MaconBibb County Water \& Sewerage Auth., 205 Ga. App. 82, 421 S.E.2d 111, 112 (1992) (contract did not give engineer express authority to decide claims for time extensions and extra compensation).
${ }^{588}$ Failure to reserve claim on contract acceptance document as required by the contract waived claim. DiGioia Bros. Excavating v. Cleveland Dep't of Pub. Utils., 135 Ohio App. 3d 436, 734 N.E.2d 438, 453 (1999); United States v. William Cramp \& Sons, 206 U.S. 118 (1907) (contractor who executes a general release cannot later sue for damages or additional compensation in excess of the amount reserved or raise new claims that were not specifically exempted from the releases). The rule extends to subcontractor pass-through claims. Once the subcontractor releases its claim against the prime contractor, the prime contractor cannot revive the claim by attempting to pass it on to the owner. George Hyman Constr. Co. v. United States, 30 Fed. Cl. 170, 177-78 (1993); Miss. State Highway Comm'n v. Patterson Enters. Ltd., 627 So. 2d 261, 263 (Miss. 1993). Also, contract standard specifications may specify that failure to reserve the claim in accordance with the contract claim procedures waives the claim. California Standard Specifications 9-1.07B (2002); New York Standard Specifications 109-14 (2002); Washington State Standard Specifications 109.9 (2004).
${ }^{589}$ Absher Constr. Co. v. Kent School Dist., 77 Wash. App. 137, 890 P.2d 1071 (1995).
${ }^{590}$ A motion in limine precludes counsel and witnesses from mentioning or referring to matters that the court has excluded. See G.O. Kornblum, The Voir Dire, Opening Statement, and Closing Argument, 23 Prac. LaW. No. 7 at 1, 21 (1977).
${ }^{591}$ Fed. R. Civ. P. 56.
may be made by a partial summary judgment using the same criteria-the facts of a particular issue are not in dispute and the law is in the favor of the moving party. If material facts are in dispute, the court will not grant summary judgment. Judges are reluctant to dispose summarily of a case where the facts are not clear. When the facts are not clear, the nonmoving party is entitled to a presumption that the facts are in its favor, although it cannot rely on this presumption alone, but must present evidence demonstrating that there is a factual dispute. Moreover, judges are often reluctant to summarily dismiss claims that arise from a contractual relationship, preferring to give the party its day in court where it can develop its contentions further and tell the judge or jury the entire story.

Because of a court's general reluctance to grant summary dismissal of the case, some see a tactical disadvantage in moving for summary judgment, unless there is a good chance that it will be granted. An unsuccessful motion for summary judgment alerts the nonmoving party to what it can expect at trial, giving it an opportunity to prepare its defense. However, the motion, even though unsuccessful, can also operate as a discovery tool since it can force the nonmoving party to present its evidence in affidavits in order to establish a factual dispute, thus alerting the moving party to what it can expect at trial. It may also help convince the opposition to adopt a more conciliatory attitude toward settlement.

Procedural motions may involve numerous procedural and housekeeping items. Motions may be made: (1) to allocate time between the parties at trial for the presentation of their respective cases; (2) to publish depositions, interrogatories, and requests for admission; (3) to exclude or obtain an advance ruling on the admissibility of evidence; (4) to determine whether the jury should be able to take notes during the testimony of witnesses; and (5) to determine whether to realign codefendants and change their order of proof. ${ }^{592}$

Another type of procedural motion that may be used, before and during trial, is a motion in limine to exclude evidence and witnesses. ${ }^{593}$ This type of motion may be used to exclude evidence that is legally inadmissible or overly prejudicial. ${ }^{594}$ The motion may also be used to prevent experts, who were never identified in answers to interrogatories, from testifying. This type of motion can be a powerful tool and should be used whenever improper evidence is anticipated.

[^105]
## d. Trial Briefs and Premarked Exhibits

i. Trial Briefs.-It is usually advisable to file a trial brief in a construction case. ${ }^{595}$ The length and details of the brief should be governed by common sense, and to the extent known, the personal preferences of the trial judge. ${ }^{596}$ In addition to suiting the judge's preferences, the length and details of the brief will also depend upon whether the case is jury or nonjury and the extent of the judge's familiarity with the case from pretrial proceedings.

In general, a trial brief serves several purposes. First, it allows counsel to argue the case in advance of trial. ${ }^{597}$ A popular method of brief writing is to divide the brief into sections: introduction, statement of the case, argument, and conclusion. The argument section is further divided into subsections that argue each point that counsel wishes to make. Each subsection should have a heading summarizing the argument. The headings should be indented and italicized or underscored for emphasis. ${ }^{598}$ The trial brief is also an outline of a party's case. In addition to educating and persuading the court, the brief allows the judge to follow the testimony. If the judge is unfamiliar with construction jargon and clauses unique to construction contracts, the brief should contain a glossary explaining technical terms and a section quoting pertinent contract clauses, a brief description of how they work, and their significance to the case. If the brief is extensive, there should be a detailed table of contents to make it easier for the judge to locate issues and statements of law.

The benefits of an extensive brief, where one is warranted, are not as valuable if a jury is involved. With a jury, the education process is limited to testimony, exhibits, instructions, and oral argument. However, the advantage of a knowledgeable judge presiding over the trial should not be overlooked. The judge has the power to veto the verdict, if the judge believes that the jury decided the case incorrectly. Also, the brief may help convince the court that, as a matter of law, the issues must be determined by the plain language of the contract, thus avoiding issues of fact for the jury. In jury cases, the brief should also contain a section that supports the jury instructions requested by the party.
ii. Pre-marked Exhibits.-Trials should be efficient. Efficient trials save money and improve the quality of justice. One way to improve efficiency is to pre-mark

[^106]exhibits in advance of trial. Each side meets and presents the exhibits that they intend to use at trial. Attorneys should not be overly concerned that disclosing proposed exhibits will reveal trial strategy. By the time of trial, the attorneys will usually be aware of the documents that will be offered as exhibits. After documents are pre-marked, counsel should stipulate to the admissibility of as many documents as possible. Premarked exhibits that have been stipulated to may be put in notebooks in numerical order. The exhibits are removed from the book(s) and used with the witnesses, without having to take the time to mark them and lay a foundation. This makes the trial go smoother and faster. Exhibits that are pre-marked but not admitted by stipulation can be handled in the normal manner and their admissibility determined by the court when they are offered.

## e. Visual Aids

As trial preparation proceeds, the attorney should consider the use of visual aids to illustrate graphically the party's contentions. Most attorneys are familiar with the value of a chart or diagram of an accident scene in a tort case, or a map indicating the location of comparables in an eminent domain case. Often, just the mention of the type of case suggests the form of the visual aid needed to assist in the presentation of the case. This is not necessarily true in a construction case. The kinds of visual aids that will be helpful will depend upon the complexity of the issues presented and whether they can be better explained by the use of a diagram, chart, model, or computer animation.
i. Charts.-Many of the claims in construction litigation involve delay in completing work. The owner may seek to assess liquidated damages because the work is not completed within the contract time. The contractor may seek damages for owner-caused delays. Charts showing the planned work schedule and the events that transpired affecting the schedule are necessary aids in explaining to the court why the delay occurred and assigning responsibility for the delay.

These charts may take various forms. The most common and accepted method of proving delay, and showing the causal relationship between culpable acts and actual work progress, is CPM scheduling. Another is a chart plotting the contractor's progress against the time it took to complete the project. For example, in a typical highway construction project, this chart will show when the contractor began grading and the amount of grading performed each day. Witnesses can use this chart to show delay and then explain why the delay occurred. Other major construction activities that are in controversy can be depicted in the same manner. The use of a simple bar chart presentation is easily understood. ${ }^{599}$ A bar chart, however, does not illustrate the

[^107]interrelationships between various work items or demonstrate how a delay of one work item affects other items of work. The CPM chart, if properly used, shows those interrelationships. ${ }^{600}$ This type of schedule analysis is necessary to show the overall effect of concurrent delay on separate items of work. Computer-generated CPM demonstrations also may prove useful in demonstrating delays and impacts.

Some claims or defenses can be better presented by a model or tridimensional chart. For example, in a DSC case, a model or tridimensional chart can illustrate, through color coding in cross-sections, the type of material encountered in the highway prism or borrow site. This allows the viewer to see the type of material that was encountered at various locations throughout the cross-sections.
ii. Photographs.-Photographs taken during various stages of a construction project can be very helpful. Aerial photos taken on a regular basis can be important evidence in showing lack of progress on a project. Photos showing equipment breakdowns can also be significant in explaining lack of progress. Videos should be taken when the video will document particular problems. Photos and videos should always be dated.
iii. Models.-One of the most dramatic visual aids that an attorney can use in presenting the case is a model. A model can provide a view of the site, depict terrain, or show relationships and concepts that can be illustrated in no other way. Because a model is dramatic, its use requires special consideration.

The first consideration is how will the model be used: Will it be offered in evidence as a reproduction of what it purports to copy, or will it be used as demonstrative evidence to illustrate testimony? If it is offered in evidence as a reproduction, it must be to scale and its accuracy established by testimony, usually by an engineer and the model maker. If it is used for illustrative purposes, it need not be to scale, but it cannot be misleading and must assist the witness in explaining the testimony. ${ }^{601}$

Another consideration is cost. Models are expensive to construct, particularly when they are built to scale. The attorney should weigh the cost of the model against its prospective benefits. The attorney should anticipate
place concrete because there were no inspectors on hand, the use of the chart can show that even if there were no inspectors on hand, concrete could not have been placed because of a breakdown in the batch plant. This may establish concurrent delay, preventing delay damages.
${ }^{600}$ CPM charts simplify complex problems. However, they should not be accepted by courts simply because they have been prepared using a computer. "As-planned" and "but for" schedules contain assumptions, not facts. The court should require the party introducing a CPM schedule to prove that it is accurate and that its assumptions have a factual basis.
${ }^{601}$ 29A AM. JUR. 2D Evidence § 993 (1994); Propriety, in Trial of Civil Action, of Use of Model of Object or Instrumentality, or of Site or Premises, Involved in the Accident or Incident, 69 A.L.R. 2d 424 (1960; supp. 2003); 7 Am. JUR. Proof of Facts § 601, "Maps, Diagrams, and Models" (1960).
how the judge will react to an elaborate and obviously costly model. ${ }^{602}$ If the model does not illustrate an important point in the case, the court may feel that its use is not justified and exclude the model on the ground that its introduction was calculated to impress rather than enlighten. ${ }^{603}$ This is especially relevant where the model is presented by a public agency. Care should be taken so that it does not appear that the agency, with its vast resources, is trying to overwhelm the contractor.

Highway construction cases lend themselves particularly well to the use of models to explain or illustrate testimony. A three-dimensional visual aid, like a picture, can be worth a thousand words. Models make it easier to understand testimony about cuts and fills, super-elevations, embankment compaction, bridges, and other three-dimensional features that are more easily shown by a visual presentation than by oral testimony.
iv. Overhead Projectors.-Because construction cases rely heavily on documentary evidence, it may be hard for a jury to understand the significance of a document unless they can see the document along with the witness. The use of an overhead projector can solve this problem. ${ }^{604}$ Through its use, the jurors can see the document during the examination of the witness. Projectors can also be used during final argument or even opening statement with respect to documents that have been previously admitted by stipulation. Care should be taken in the type of projector used. Projectors that can be used without having to dim the courtroom lights and that are not noisy should be used. The presentation, to be effective, should be smooth. The attorney should consider having a legal assistant or paralegal operate the projector and handle the transparencies or the original documents if they are placed on the projector.
v. Other Considerations.-Effective demonstrative exhibits illustrate a point clearly and quickly. Juries pay attention to what they understand and reject or ignore what they do not understand. Thus, exhibits should not attempt to convey too much information. They should be limited to one key message that is readily understood. ${ }^{605}$ Once the attorney has made the point with the exhibit, the attorney should stop and not be redundant. Juries and judges quickly become tired of hearing the same point over and over.

There are companies that specialize in creating visual aids for use in litigation. They are experts in how to present graphic information. There are also companies that specialize in building scale models. Both types of companies should be consulted in appropriate cases,

[^108]where the use of a model or innovative graphics will be helpful or necessary. Companies that offer these kinds of services usually advertise in the yellow pages and bar journals. Claims consultants, particularly financial consultants, have computer programs that will produce graphic information in a variety of formats. Consultants are usually the best source of ideas on how to create visual aids for effective presentation of their testimony.

## f. Settlement Negotiations Practice

Serious consideration should be given to possible settlement of the litigation. In a typical construction dispute, the contractor should be placed in the situation where he should consider sound business considerations as opposed to moral principles and just causes. There are many reasons favoring the settlement of litigation, which include avoiding the cost and time of litigation. It is not unusual for a case to take 3 to 5 years to reach a trial, even without considering the time for appeals. Early negotiated settlement relieves all parties of the cost of attorney fees and other expenses. Indirect costs, such as the cost of preparing demonstrative evidence and the costs of retaining experts, can be avoided. Avoiding lengthy litigation also allows key employees to focus their attention on business or governmental matters, which are their primary responsibilities, instead of being tied up with interviews, document production, depositions, trial testimony, and the other demands of litigating a case to conclusion.

Another good reason for considering settlement, often overlooked, is the risk of ultimate failure or loss in the litigation. Serious attention should be focused on an exposure analysis prepared by the litigation team that evaluates the potential outcome of the litigation. The potential evidence and testimony, contract provisions, damages, accounting, defenses, and applicable case law should be reviewed and assessed to arrive at a potential exposure analysis. This should be discussed by counsel with agency management prior to trial, permitting the agency to make a sound business decision on whether to go ahead with the litigation or pursue a negotiated settlement. If a negotiated settlement is desired, a negotiation team should be assembled and a strategy developed to arrive at a successful negotiation.

The team should have only one spokesman, whose rank and authority is recognized by team members, who serves as the battlefield commander. The team should also be supported by various experts and engineering staff who have knowledge of the claim.

Successful negotiation demands that agency negotiators should establish and maintain a sound cooperative relationship of mutual respect with contractors.

Basic personal guidelines for negotiation include the following principles:

- Do not dictate. You do not represent the government but you are reasonable.
- Do not ridicule or insult.
- Do not try to make anyone look bad or prove any-
one wrong.
- Do not discriminate; accept a good offer.
- Do fight hard on important points, but do not fight battles that you have no chance of winning-focus on winning the war, not the battle.
- Be courteous and considerate, and do what you say you will; have integrity.
- Do know when to talk and when to sit and listen. ${ }^{606}$
- Bargain in good faith. Negotiations carried out in an atmosphere of hostility and distrust are rarely successful, because neither side is willing to listen with an open mind to what the other side is saying. ${ }^{607}$


## 8. The Trial

The presentation, argument, and examination techniques of a construction contract trial are not dissimilar to other types of trials. ${ }^{608}$ There are, however, certain unique aspects that should be considered in the presentation of the case.

## a. The Opening Statement

No single guideline governs how opening statements should be made. Their use is governed by a variety of considerations that depend upon the nature and complexity of the case and whether the case is tried to a judge or jury. There are, however, some guidelines that usually apply.

As a general rule, an opening statement should be presented at the commencement of the trial and not deferred until defense counsel commences his or her case-in-chief. If the opening statement is reserved, there should be a good reason for doing so. ${ }^{609}$ The opening statement should be a road map of what your case will be and have an overall theme or theory that pieces the case together. ${ }^{610}$ Outline the segments of the trial and their function to allow the jury to have a better understanding of how the trial will proceed. Do not read an opening statement. Counsel should talk directly to the judge or jury and maintain eye contact with them. The use of notes should be minimized. Visual aids, such as photographs, maps, aerials, and models, should be used to explain and illustrate what the evidence will

[^109]show. Pre-mark the exhibit and obtain permission from the court to use it in the opening statement, if opposing counsel refuses to stipulate to its use. This practice avoids an objection that could harm the effectiveness of the opening statement.

The opening statement should not be argumentative. Opening statements that are argumentative will usually draw an objection, which is likely to be sustained. Although argument must be avoided, counsel should make a strong statement of what he or she intends to prove, remembering that your opponent is entitled to comment in final argument on what you failed to prove. The opening statement should be phrased in simple terms with an explanation of the technical terms that may be used during the trial. However, counsel should never talk down to the jury or appear condescending. Witnesses should be introduced by occupation, not by name. For example, refer to the project engineer as the project engineer, not Mr. James. ${ }^{611}$ The jury should be told how the witnesses fit into the case, and what they will say when they testify.

An opening statement should be comprehensive. As a general rule, an attorney will gain more in educating and conditioning the trier of fact than the attorney will lose in exposing his or her case in advance. ${ }^{612}$ While the opening statement should be comprehensive, it should not be redundant. Counsel should avoid covering the same ground over and over. The trier of fact should be favorably impressed by an opening statement that is logical and comprehensive, yet succinct. This type of presentation will enhance the attorney's credibility and the credibility of his or her client's case. In the final analysis, the most important attribute that a trial attorney has is credibility.

## b. Direct Examination

Typically, the most important part of any trial is direct examination. More cases are won by direct testimony than by cross-examination or final argument. Because of its importance, counsel should ensure that direct testimony is presented in a way that is easily understood by a judge or jury.

Direct examination should be business-like, not spectacular or dramatic. It should be brief and to the point. Once a point is made, stop. Go on to the next point. Covering the same ground again may do more harm than good. It may weaken the impact of what has been established and irritate the judge and the jury. It may even draw an objection from the court on its own volition, if not from opposing counsel.

The focus should be on the witness, not on the attorney, during the direct examination. A case is won by what the witnesses say. Counsel should not draw attention to himself or herself by pacing back and forth or by engaging in other distracting mannerisms. Questions

[^110]should be short, clear, and whenever possible phrased in plain, simple English. Construction jargon and technical terms should be used only when necessary, and the witness should be asked to explain them and give examples to illustrate their meaning. Visual aids should be used to explain and illustrate the witness's testimony. ${ }^{613}$

Leading questions should be avoided, not only because they are objectionable, but more importantly because the witness should be testifying, not the lawyer. ${ }^{614} \mathrm{~A}$ witness who is nothing more than a sounding board for the attorney has little credibility. Some lawyers write out their questions, others do not. Attorneys write down their questions in case they have problems formulating them and as a safeguard when direct examination is interrupted by an objection. Whatever one's preference, it is a good practice to have an outline listing point by point each topic that will be covered with the witness. An outline of this kind should be part of every trial notebook. ${ }^{615}$ The outline should be reviewed with the witness before trial. Psychologically, this is helpful to the witness since the witness knows, when taking the stand, what the questions will be. Ideally, the direct examination should be like a friendly chat about some aspect of the case. Transitional questions such as "turning now to..." should be used to make the direct smoother and easier to follow. Avoid leading questions by using the "who," "how," "where," and "why" approach in formulating questions.

In preparing witnesses to testify, counsel should discuss certain guidelines with the witness. The witness should be told to listen to the question and answer the question as asked. The witness should be told not to volunteer or elaborate and that you will develop the witness's testimony. ${ }^{616}$

The order in which witnesses are called should be logical, and should allow you to lay out the case the way you want it presented. The conventional trial wisdom that you should begin and end with strong, substantive testimony is not always true. While you should end with a strong witness, ${ }^{617}$ you may wish to begin with a minor witness, when that witness's testimony is the starting point for your case. For example, calling the office engineer from a project office to show in a DSC claim that the agency provided the boring logs to the

[^111]contractor during the bidding phase. This testimony is necessary to establish a foundation that the contractor actually knew or should have known about the soil conditions. ${ }^{618}$ Contractor personnel who are managing agents (superintendents, foremen, project managers) should be subpoenaed and called as adverse witnesses. This permits counsel to ask leading questions and in effect cross-examine them. ${ }^{619}$ The trial notebook should contain a list of questions that must be asked to lay a foundation for the admission of a document, photograph, or chart. Use of the outline allows counsel to lay a foundation crisply and smoothly, thus enhancing counsel's credibility with the court and the jury.

Sometimes owners feel so strongly about their lack of liability for a construction claim that they ignore damages. Owners should keep in mind that when liability and damages are tried together, large losses by the contractor may influence the trier of fact in making a determination about liability. Moreover, plaintiff's damages may be so poorly presented that doubt is cast on the overall merits of the claim. The dilemma for the defense is whether to offer testimony on damages, or stand on the contractor's failure to meet its burden of proof on damages. There are no rules concerning this dilemma. The strategy in dealing with this problem must be carefully considered and will vary depending upon the case. However, conventional wisdom tells us that it is probably better to put on some evidence refuting damages as part of the owner's case-in-chief, unless the defense has successfully refuted the damage calculations.

## c. Cross-Examination

More books and articles have probably been written about cross-examination than any other phase of a trial. The most dramatic part of any movie or television show featuring a trial is the cross-examination of a key witness. Invariably, writings about cross-examination point out what the cross-examiner should not do-the so-called "don'ts" of cross-examination. ${ }^{620}$ For example, avoid asking open-ended questions such as "why" or "how" of an articulate and knowledgeable hostile witness. Instead ask leading questions that call for a "yes" or "no" answer, or questions to which the witness will give only the answer you anticipate. If you gamblebecause you do not know for sure what the witness will say-do so only when the answer cannot hurt your case. Be fair to the witness, do not embarrass the witness,

[^112]and do not get angry at the witness. The crossexamination should be business-like and have a purpose. Generally, cross-examination can be designed to discredit the witness, or to solicit facts or admissions that can support your case. It should not be used to discover information about the case unless the witness is friendly and cannot possibly say anything that will hurt your case, but even then be cautious. Be thorough, but be brief and do not cover the same points over and over. Make your point and stop.

Should you always cross-examine every witness simply because the witness testified? Conventional trial wisdom says no, if the testimony has not hurt your case. ${ }^{621}$ But if the testimony is damaging, it should not stand unchallenged. Find something you can attack, particularly if the witness is a retained expert. For example, if the witness is a retained expert, explore bias. Through discovery, you should have obtained what the witness's fee arrangement is, how much the witness has been paid, when, by whom he or she was retained, and any other cases in which the opposing attorney or party has engaged the witness.

Counsel should be thoroughly familiar with the deposition testimony of the witness he or she is interrogating. Statements in the deposition transcript that are inconsistent with the witness's testimony at the trial can be used for impeachment, but counsel should avoid the appearance of nitpicking by using a minor or trivial inconsistency to impeach. ${ }^{622}$ Also, counsel should consult his own expert for areas of cross-examination. This is particularly important in preparing for crossexamination of the opposing party's expert. Your expert can review the deposition transcript of the opposing expert and can suggest questions that should be asked on cross-examination. ${ }^{623}$ But counsel should be careful about asking questions on cross-examination suggested by others (including your own experts) when you do not understand the question. The opposing expert will usually have an answer, and if you do not understand the question you asked you probably will not understand the answer, leaving counsel with the choice of letting the answer stand or asking another question and maybe getting into even more trouble.

One of the problems of cross-examination in a construction case is keeping track of what occurred on the project and how those facts bear on the witness's testimony. This is often true in cross-examining a claims expert or project superintendent or manager who has overall knowledge of the project. One technique is a

[^113]chart that diagrams the various construction phases of the project, including significant construction activities. This chart allows counsel to keep track of all aspects of the project as they occurred. The chart should be keyed to counsel's trial notebook. ${ }^{624}$ The notebook can contain a section on each phase of the project, including areas to inquire about on cross-examination and documents by exhibit number (if pre-marked), that can be used during the cross-examination.

There are other ways, of course, of preparing for cross-examination. Often, how one prepares is a matter of personal choice. However, prepare for crossexamination before the trial begins. Counsel should know from pretrial discovery what the witness will say and be prepared to deal with it.

## d. Presentation of Multiple Claims

Rarely will a construction contract case be limited to a single claim. Once a contractor decides to file suit on one claim, all disputes that have been preserved can be expected to be litigated. Where the lawsuit consists of several claims, the contractor has several methods it can use in presenting its claim. One method is to present each claim separately. The difficulty with this method is that some aspects of the project will be repeated as the facts are developed for each of the claims. The contractor will usually begin with the dominant claim and then proceed to the more minor claims. Another method is to present each claim as it arose in chronological order during the course of the project. This method avoids redundancy by allowing the project facts to be presented in an orderly and sequential manner from the commencement of the project to its completion.

Rather than anticipate which method the contractor will use in presenting its case, the owner may ask the court to rule in advance of trial as to which method must be used. ${ }^{625}$ Knowing in advance how the contractor's case-in-chief will be presented helps the owner organize its cross-examination. Establishing the order in which the claims will be presented makes the trial more efficient and saves the court time. ${ }^{626}$

## e. Closing Argument

Some lawyers have a section in their trial notebook to jot down ideas for final argument. Some attorneys review their trial notes and from them develop an outline of their final argument. Others prepare an outline of their final argument before the trial even starts on

[^114]the assumption that the case is sufficiently well prepared to prevent any surprises.

Whatever technique is used, the final argument should be just that-an argument. Someone once observed that more cases are lost by a poor argument than won by a good one. That is a good admonition for lawyers to follow even if it is not precisely true. The final argument should be carefully prepared. Many who write about trial practice say that the closing argument must tell a story. The lawyer should paint a picture that is so compelling that the judge or jury must find in his or her client's favor. This, of course, is the ideal presentation. Attaining this ideal is even more difficult when the case is complex and involves a multitude of issues.

The closing argument, like other phases of a trial, has certain recognized guidelines that counsel should consider. These guidelines are often referred to as "do's" and "don'ts." For instance, it is improper to refer to matters that are not in evidence. ${ }^{627}$ Another "don't" is never read a closing argument to a jury. To be effective and creditable, counsel must talk to the jury. Reading a speech to the jury is not talking to them. If permitted by the court rules, relate and argue how the jury instructions apply to the issues and the conclusions that the jury should reach in deciding the case. Relate the evidence in a way that shows that you proved what you said you would prove in your opening statement. This ties the opening statement to the closing argument, giving your case continuity and credibility.

Organize documentary evidence in a way that is keyed into your argument. Use enlargements of important documents that the jury can easily read as you argue their significance. ${ }^{628}$

Some lawyers make very little, if any, preparation for closing argument. They jot down a few notes on a yellow tablet sheet and then speak extemporaneously. Unless you have a natural talent for arguing cases, you should avoid this practice. Take the time to organize the argument in outline form. In concluding your argument, tell the jury that your opponent now has the opportunity to rebut what you have said. Point out that your opponent has this opportunity because plaintiff has the burden of proof. Tell the jury that you will not have an opportunity to respond to your opponent's remarks, but that you do not need that opportunity. Why? Because the evidence itself serves as rebuttal to what he or she may say.

The closing argument is an important part of the trial. Your argument may not win the case, but you should avoid a hastily prepared argument that could lose it.

[^115]
## f. Other Trial Considerations

i. Taking Notes During Trial.-Conventional trial wisdom suggests that the attorney divide each page of a legal tablet down the middle with a vertical line. Notes are placed on one side of the line and comments, questions, or reminders on the other. One problem with this method is that it is an invitation to try to write down everything the witness says. If you accept this invitation, you may miss the jury's reaction to the witness, any nuances in the testimony, objections that should be made, and more important, what the witness is really saying.

In the first place, the attorney does not need to take notes during the direct examination of his or her witness. Second, note taking should be selective. It should be limited to the points that will be covered in crossexamination, and not a re-hash of the direct examination. Points developed through pre-trial discovery, and questions suggested by your experts can be prepared in advance for cross-examination and added to the notes on separate sheets of paper.

Good, complete note taking should not be performed by the trial lawyer. That task should be done by someone else sitting at counsel table.
ii. Housekeeping.-Good housekeeping techniques are important. A chart should be kept of each document that is marked as an exhibit. The chart should identify the document, show whether it was admitted, and show whether it was admitted only for illustrative purposes. ${ }^{629}$ The chart should list the exhibits in numerical order. Pre-marked exhibits can be listed in advance. The task of keeping track of exhibits should be assigned to the paralegal sitting at counsel table with the trial lawyer.
iii. Jury Instructions.-In preparing jury instructions, considerations should be given to the verdict form. A special verdict form submitting questions to the jury may help in focusing the case. For example, the verdict form in a case involving the assessment of liquidated damages could provide as follows:

We, the jury, make the following answers to the questions submitted by the court:

Question No. 1: Should liquidated damages be assessed against the plaintiff?

Answer: (Yes or No)
Question No. 2: If your answer to Question No. 1 is "yes," then answer the following question: The number of days that should be charged for liquidated damages are $\qquad$ .

The questions may also ask the jury to focus on the State's liability. For example:

[^116]Question No. 1: Did the State breach its contract with plaintiff by withholding information about the pit site, which was vital for the preparation of plaintiff's bid?

Answer: (Yes or No) $\qquad$ .

Question No. 2: Did a differing site condition occur in the pit site as alleged by plaintiff?

Answer: (Yes or No) $\qquad$ _.
If your answer is "no" to all of the above, do not answer any further questions. If your answer is "yes" to any of the above, then answer the following questions:

Question No. 3: Did the breach cause damage to plaintiff's subcontractor?

Answer: (Yes or No)
Question No. 4: If the answer to Question No. 3 is "yes," what is the amount of those damages?

Answer: $\qquad$ —.

Question No. 5: If you award damages to plaintiff's subcontractor, what percentage is plaintiff entitled to as markup for overhead and profit on the amount of those damages?

Answer: $\qquad$ percentage.
iv. Excluding Evidence.-Counsel should consider whether evidence proffered by opposing counsel may be excluded by the court as a matter of law. For example, there is some authority, although slight, that expert testimony as to the cause and effect of construction delays is not admissible, because the subject matter is not beyond the common knowledge of the jury. ${ }^{630}$ Defense counsel should also consider excluding the contractor's employees as experts on delay claims. ${ }^{631}$ Reports prepared for settlement discussions should not be admissible. ${ }^{632}$ Efforts to exclude testimony should be raised by motions in limine. ${ }^{633}$
v. Summaries.-Counsel should consider using summaries of records where the underlying records are so voluminous that it would be impractical to admit them in evidence. To be admissible in summary form, the underlying records themselves must be admissible, and they must be made available to the opposing party for inspection. ${ }^{634}$ Trial courts have wide discretion in determining whether summaries are necessary to expedite the trial, and whether the opposing party had a reasonable opportunity to examine the records. ${ }^{635}$
vi. Trial Preparation for Witnesses.-Witnesses should be provided with general instructions that serve as a guide when they testify. ${ }^{636}$ Witnesses must be warned that they must fully understand each question before they answer. The witnesses should be told that they can have a question repeated or rephrased if they do not understand it.

Witnesses should be reminded that they do not have to answer a question "yes" or "no" during crossexamination if they cannot do so. Even if the witness does answer "yes" or "no," he or she may explain the answer. If the examining attorney prevents the witness from explaining the answer, the defending attorney can have the witness explain the answer during the redirect examination.

Witnesses should be advised not to take notes or documents to the witness stand when they testify, or review them in the courtroom before they testify, because the questioning attorney will be entitled to review those materials. ${ }^{637}$ Any documents they need should be supplied by their attorney. Finally, the witnesses must

[^117]be aware that they are expected to be knowledgeable in the areas of the construction project in which they were directly concerned. They do not have to be experts in those areas of responsibility where they rely on the expertise of others, such as a project engineer relying on the expertise of a soils engineer or geologist. But the witness must be able to respond to questions in his or her area of responsibility. Witnesses who have been deposed should carefully review their deposition transcripts before testifying.
vii. Present the Case in Plain English.-Counsel and their witnesses must keep in mind that judges and juries base decisions on their understanding of the relevant facts. Because construction cases are often complex, it is essential that the trier of fact does not become lost in technological details. Present the case in plain English and have the witnesses explain technical terms, using examples as appropriate to illustrate their meaning. But never talk down to the trier of fact. The attorney or witness who speaks in a condescending or oversimplified fashion may alienate the judge or jury and harm his or her case.

## APPENDIX ${ }^{638}$

## List of Affirmative Defenses

Denial of liability on the merits
Engineer's determination of claims final
Waiver or release of claim rights
No notice of potential claim
Failure to give proper, detailed, and timely notice required by contract

Extra work not ordered in writing
Work performed was beyond the scope or requirements of the contract

Failure to protest written change order
Subject matter of claim covered by an executed change order

Failure to comply with or fulfill condition precedent provisions of the contract

Failure to submit contemporaneous records
Claim compromised and released
An election to perform work knowing it was misrepresented by the contract

Negotiation of final pay warrant releasing any and all claims without reservation

Payment
Bid submitted without seeking clarification or interpretation of contract provisions

Estimated quantities approximate only
Failure to cooperate with other forces
Assumption of the risk of unforeseen difficulties
Superior knowledge and expertise
Duty to examine plans, specifications, and work site and satisfy himself as to conditions

Voluntary selection of the method of performance
Statute of limitations
Statute of frauds
Failure to mitigate damages
Failure to comply with claims statute
Failure to exhaust contractual remedies
Unjust enrichment
No damage
No damages for delay clause (time extension only)
Subcontractor's damage without liability (Severin Doctrine)

Collateral source rule
Damages consequential in nature
Damages as a result of inefficiencies and matter of the contractor's control and responsibility

Failure to mitigate damages
Damage or delay caused by the contractor
Acts of the engineer beyond scope of authority
Oral modifications of the contract
Oral promises or representations

[^118]Acts beyond delegated responsibilities
Violations of law or contract
No contractor's license
Subcontracting in violation of the contract or law
Violation of prequalification statutes or regulations
Claim sounds in tort
Failure to comply with public tort claims statutes Sovereign immunity
Failure to state a cause of action or claims


[^0]:    ${ }^{1}$ While an early resolution of the claim is usually in the owner's best interest, claims that lack merit should not be settled simply to make them go away. A policy of settling everything and litigating nothing often encourages more claims.

[^1]:    ${ }^{2}$ S.J. Groves \& Sons v. State, 93 Ill. 2d 397, 444 N.E.2d 131, 67 Ill. Dec. 92 (Iowa 1982); 72 Am. JUR. 2D, States, Territories and Dependencies, §§ 92 \& 93 (2d ed. 2001), Stone v. Ariz. Highway Comm'n, 93 Ariz. 384, 381 P.2d 107 (Ariz. 1963).
    ${ }^{3}$ Federal Sign v. Tex. So. Univ., 951 S.W.2d 401, 412 (Tex. 1997) (dismissing claim for breach of contract based on sovereign immunity).
    ${ }^{4}$ Stone v. Highway Comm'n, supra note 2, at 109; Jaffe, Suits Against Governments and Officers: Sovereign Immunity, 77 HARV. L. REV. 1 (1963).
    ${ }^{5}$ Hocking, Federal Facility Violations of the Resource Conservation and Recovery Act and the Questionable Role of Sovereign Immunity, 5 ADMIN. L. J. 203 (1991).
    ${ }^{6}$ Stone v. Highway Comm'n, supra note 2, at 111.
    ${ }^{7}$ The Table in Part 3.b infra lists those states that have taken that position, including case citations.

[^2]:    ${ }^{8}$ George \& Lynch Co. v. State, 57 Del. 158, 197 A.2d 734, 736 (Del. 1964).
    ${ }^{9}$ Wis. Stat. 16.007.
    ${ }^{10}$ The Table in Part 3.b infra lists those states that have enacted legislation waiving sovereign immunity.
    ${ }^{11}$ New York, for example, has a State Court of Claims to determine contract claims, N.Y. Court of Claims Law § 9. Pennsylvania has similar legislation creating a Board of Claims to determine breach of contract claims against the Commonwealth, 62 Pa. Cons. Stat. § 1724. Other states that have adopted similar approaches are listed in the Table in Part 3 of this Subsection.
    ${ }^{12} 18$ Vt. Stat. Ann. 5.
    ${ }^{13}$ Federal Sign Co. v. Tex. So. Univ., 951 S.W.2d at 408-09.
    ${ }^{14} \mathrm{Id}$. at 408 n.1.
    ${ }^{15} 997$ S.W.2d 687 (Tex. App. 1999).
    ${ }^{16} I d$. at 691 .

[^3]:    ${ }^{17} 24$ S.W.3d 893, 901 (Tex. App. 2000).
    ${ }^{18}$ Hans v. La., 134 U.S. 1, 16, 10 S. Ct. 504, 33 L. Ed. 842 (1890); Duhne v. N.J., 251 U.S. 311, 40 S. Ct. 154, 64 L. Ed. 280 (1920); Employees v. Department of Public Health and Welfare, 411 U.S. 279, 93 S. Ct. 1614, 36 L. Ed. 2d 251 (1973); Edelman v. Jordan, 415 U.S. 651, 663, 94 S. Ct. 1344, 39 L. Ed. 2d 662 (1974).
    ${ }^{19}$ Ford Motor Co. v. Department of Treasury, 323 U.S. 459, 464, 65 S. Ct. 347, 89 L. Ed. 389 (1945). Edelman v. Jordan, 415 U. S. at 663.
    ${ }^{20}$ Edelman v. Jordan, id. at 673.
    ${ }^{21}$ Green v. Mansouer, 474 U.S. 64, 68, 88 L. Ed. 2d 371, 106 S. Ct. 423 (1985).
    ${ }^{22}$ Edelman v. Jordan, 415 U.S. at 674.

[^4]:    ${ }^{23}$ Arizona, California, Florida, New York, Oregon, Pennsylvania, South Dakota, and Washington.
    ${ }^{24}$ Florida Department of Transportation Standard Specifications for Road and Bridge Construction (2000).
    ${ }^{25}$ AASHTO Guide Specification § 105.18 (2007); see also California Specification 9-1.04; Pennsylvania Specification 9.105-14; South Dakota Specification 5.17.
    ${ }^{26}$ A.H.A. Gen. Constr., Inc. v. N.Y. City Housing Auth., 92 N.Y.2d 2D, 699 N.E.2d 368, 376, 677 N.Y.S.2d 9 (N.Y. 1998).
    ${ }^{27} I d$.
    ${ }^{28}$ Blankinship Constr. Co. v. State Highway Comm'n, 222 S.E.2d 442 (N.C. 1976); Main v. Department of Highways, 206 Va. 143, 142 S.E.2d 524, 530 (Va. 1965); Absher Constr. Co. v. Kent Sch. Dist., 78 Wash. App. 137, 890 P.2d 1071, 1073 (1995); Ritangela Constr. Corp. v. State, 183 A.D. 2d 817, 584

[^5]:    N.Y.S.2d 108, 110 (1992); Glynn v. Gloucester, 21 Mass. App. Ct. 390, 487 N.E.2d 230, 233 (1986); PYCA Indus. v. Harrison County, 177 F.3d 351 (5th Cir. 1999).
    ${ }^{29}$ AASHTO Guide Specifications 105.18.
    ${ }^{30}$ Specification 5-12 (2000). The California Standard Claims Specification is more generalized. Section 9-1.04 (1999) requires the contractor to submit notice of a potential claim on a standard form (CEM-680). When the affected work is completed, the contractor must submit substantiation of its actual costs. Failure to do so waives the claim.

[^6]:    ${ }^{31}$ Florida Standard Specification for Road and Bridge Construction at pp. 5-12 (2010).
    ${ }^{32} \mathrm{Id}$. at 5-12.2.1.

[^7]:    ${ }^{33}$ Id. at 5-12.4.
    ${ }^{34}$ Id. at 5-12.3.
    ${ }^{35}$ Florida Standard Specification, 5-12.4.
    ${ }^{36}$ Id. at 5.12.14.
    ${ }^{37}$ The Specification used by the Washington State Department of Transportation allows the agency to audit financial statements for 3 years preceding execution of the contract and 3 years following final acceptance of the contract, in addition to auditing financial statements for all years reflecting operations relating to the contract. Standard Specification 1-09.12 (2000).
    ${ }^{38}$ Claims based on the total cost method are discussed in Subsection C. 4 of this Section.

[^8]:    ${ }^{39}$ Defective work may explain why the profits are so large. The counter argument is that admission of large profits may be too prejudicial. See Federal Evidence Rule 403.
    ${ }^{40}$ Pass-through claims are discussed in Subsection C. 4 of this Section.
    ${ }^{41}$ Escrow bid documentation specifications are discussed later in this Subsection.
    ${ }^{42}$ WSDOT Standard Specification C1-09.12(3)(20) (2000).
    ${ }^{43}$ Id. 1-09.12(3)(22) (2000).
    ${ }^{44}$ Florida Standard Specification, supra note 24.

[^9]:    ${ }^{45}$ Arizona Standard Specification 105.21 (2000).
    ${ }^{46}$ Oregon Standard Specification 00199.40 (1996).
    ${ }^{47}$ Sutton Corp. v. Metro. Dist. Comm'n, 423 Mass. 200, 667 N.E.2d 838 (1996).
    ${ }^{48}$ D.C. v. Organization for Envtl. Growth, Inc., 700 A. 2 d 185, 201 (D.C. App. 1997).
    ${ }^{49}$ Whether the claim will be deemed as waived may depend upon whether the owner can show that it was prejudiced by the contractor's failure to comply fully with the notice of claim requirements. A.H.A. General Constr. Co. v. N.Y. Housing Auth., 92 N.Y.2d, 20, 699 N.E.2d 368, 374, 677 N.Y.S.2d 9 (1998) (strict compliance with notice requirements required); Absher Constr. Co. v. Kent Sch. Dist., 77 Wash. App 137, 890 P.2d 1071, 1095 (showing of prejudice not required to enforce notice provision); New Pueblo Constructors, Inc. v. State, 144 Ariz. 95, 696 P.2d 185, 188 (1985) (showing of prejudice re-quired-applying federal contract law).
    ${ }^{50}$ Section 5-12.4 of the Florida Standard Specifications provides for a response within 90 days for claims on contracts having an original amount of $\$ 3$ million or less and 120 days for contracts having an original amount greater than $\$ 3$ million. The WSDOT Specification provides for a response based on the size of the claim: 45 calendar days for claims under $\$ 100,000$ and 90 calendar days for claims of $\$ 100,000$ or more. The time may be extended if necessary. Standard Specification 1-09.11(2) (2000).

[^10]:    ${ }^{51}$ Florida Specification, supra note 44.
    ${ }^{52}$ The Arizona specification, for example, uses a three-step hearing process. If the contractor does not accept the project engineer decision, the contractor may request a review by the district engineer and then the State Engineer. Standard Specification 105.21 (2000).
    ${ }^{53}$ South Dakota Standard Specification 5.17 (1998); New York Standard Specification 109.05F (1995). Both specifications require that certifications be made under oath before a notary public.
    ${ }^{54}$ AASHTO Guide Specification, op. cit., 105.18, Claims for adjustment, at 52-53.
    ${ }^{55}$ The California False Claims Act is discussed in Subpart 4 of this Subsection.
    ${ }^{56}$ Standard Specification 9-1.04 (1999).
    ${ }^{57}$ Caltrans Standard Specifications 9-1.17(D)(2)(c).
    ${ }^{58}$ Id.

[^11]:    ${ }^{59}$ Caltrans Standard Specifications 5-1.43
    ${ }^{60}$ Standard Specification 5-12.10.
    ${ }^{61}$ Standard Specification 5-12.12.
    ${ }^{62}$ Standard Specification 5-12.4. Metropolitan Dade County v. Recchi America, Inc., 734 So. 2d 1123 (Fla. App. 1999) (contractor must follow contract claim procedures prior to commencement of suit).

[^12]:    ${ }^{63}$ NYSDOT Standard Specifications, Sept. 2011, § 102 H.

[^13]:    ${ }^{64}$ Thirty-one states provide for some form of litigation. See Sovereign Immunity/Administrative Procedures Table supra.
    ${ }^{65}$ Arizona, Oregon, and Washington. See Sovereign Immunity/Administrative Procedures Table supra.
    ${ }^{66}$ California, Delaware, and North Dakota. See Sovereign Immunity/Administrative Procedures Table supra.
    ${ }^{67}$ Idaho, Maryland, Ohio, Pennsylvania, and Tennessee are examples. See Sovereign Immunity/Administrative Procedures Table Decisions of the Maryland State Board of Contract Appeals are subject to judicial review, as with other civil cases.
    ${ }^{68}$ The Federal False Claims Act is codified at 31 U.S.C. $\S \S$ 3729 et seq. State false claims statutes are cited and discussed further under subsection (A)(4)(e) below.
    ${ }^{69} 12$ Stat. 696, 37 Cong. Ch. 67 (Mar. 2, 1893); United States v. Bornstein, 423 U.S. 303, 309-10, 96 S. Ct. 523, 46 L. Ed. 2d 514 (1976); see Evan Caminker, Comment, The Constitutionality of Qui Tam Actions, 99 Yale L. J. 341 (1989).
    ${ }^{70}$ The provision authorizing the Attorney General to pursue investigations and civil actions is 31 U.S.C. § 3730(a); such actions may be commenced if the Attorney General finds that a person or persons has violated or is violating 31 U.S.C. § 3729.

[^14]:    ${ }^{78}$ The American Recovery and Reinvestment Act of 2008 (ARRA), Pub. L. No. 111-5, Feb. 17, 2009.
    ${ }^{79}$ Fraud Enforcement and Recovery Act of 2009 (FERA), Pub. L. No. 111-21, 123 Stat. 1617, May 20, 2009 (FERA); text available at
    http://www.gpo.gov/fdsys/pkg/PLAW-111publ21/pdf/PLAW111publ21.pdf (last accessed July 24, 2012).
    ${ }^{80} 31$ U.S.C. $\S 3729$ et seq.
    ${ }^{81} 553$ U.S. 662, 128 S. Ct. 2123, 170 L. Ed. 2d 1030 (2008).
    ${ }^{82}$ For a discussion of the prior case law, and of congressional intent in enacting the FERA provisions amending the False Claims Act, see LRD 55, supra note 75, at 7-12.
    ${ }^{83}$ LRD 55, supra note 75 , at 10-15.

[^15]:    ${ }^{84}$ For a more detailed discussion of these various federal training, investigative, and enforcement initiatives, see LRD 55 , supra note 75 , at $15-18$.
    ${ }^{85}$ For a more detailed discussion of the fraud prevention measures included in the 2008 amendments to the FARs, see LRD 55, supra note 75, at 18-20.
    ${ }^{86}$ For a more detailed discussion of what constitutes a false claim, see LRD 55, supra note 75, at 20-22.
    ${ }^{87}$ See 31 U.S.C. § 3729(b), Definitions.
    ${ }^{88}$ United States v. Advance Tool Co., 902 F. Supp. 1011 (W.D. Missouri 1995) (presenting invoices for tools that were reversed engineered rather than brand names as required).

[^16]:    ${ }^{89}$ See FERA, supra note 79, § 4(a)(2).
    ${ }^{90}$ For a more detailed discussion of these and other examples of false claims, see LRD 55, supra note 75, at 22-26.
    ${ }^{91}$ See United States v. Peters, 927 F. Supp. 363 (D. Neb. 1996).
    ${ }^{92}$ See United States ex re. Ali v. Daniel, Mann, Johnson \& Mendenhall, 355 F.3d. 1140 (9th Cir. 2004).
    ${ }^{93}$ Galvan v. Fed. Prison Indus., Inc., 339 U.S. App. D.C. 248, 199 F.3d 461, 463 (D.C. Cir. 1999); for a good discussion of who can be sued under the FCA, see Charles M. Sink \& Krista L. Pages, eds., False Claims in Construction Contracts, Federal, State and Local, American Bar Association, 2007, at 4767. (Note that an updated version of the Sink and Pages publication was released on CD-ROM in 2010.).
    ${ }^{94}$ See Vt. Agency of Natural Res. v. United States ex rel. Stevens, 529 U.S. 765, 120 S. Ct. 1858, 146 L. Ed. 2d 836 (2000).

[^17]:    ${ }^{95}$ For a more detailed discussion of the applicability of the FCA with regard to federal, state, and municipal agencies and officials, see LRD 55, supra note 75, at 26-27.
    ${ }^{96}$ FERA, supra note 79.
    ${ }^{97} 31$ U.S.C. § 3729.
    ${ }^{98} 31$ U.S.C. § 3730.
    ${ }^{99} 31$ U.S.C. § 3730(h).
    ${ }^{100} 31$ U.S.C. § 3731.
    ${ }^{101} 31$ U.S.C. § 3732.
    ${ }^{102} 31$ U.S.C. § 3733.
    ${ }^{103} 31$ U.S.C. § 3730(b)(1).
    ${ }^{104} 31$ U.S.C. § 3729.
    ${ }^{105} 3$ William Blackstone, Commentaries on the Laws of England 160, and BLACK's Law Dictionary 1251 (6th ed.), as cited and quoted in Claire M. Sylvia, The False Claims Act: Fraud Against the Government 34-35 nn. 1 and 2 (2d ed., Thomson West 2010).
    ${ }^{106}$ For an excellent discussion of the historical roots of qui tam actions and the False Claims Act, and the evolution of the concept since enactment of the Act, see SYLVIA, supra note 105, at 34-64.

[^18]:    ${ }^{107}$ Claire M. Sylvia, Qui Tam Actions Under the False Claims Act, included as ch. 5 in Sink \& Pages, supra note 93.
    ${ }^{108} 31$ U.S.C. $\S \S 3730$ (b) through (g), 3731, 3732, and 3733.
    ${ }^{109} 31$ U.S.C. § 3730(b)(1).
    ${ }^{110} 37$ U.S.C. § 3732(a).
    ${ }^{111} 37$ U.S.C. § 3732(b).
    ${ }^{112} 37$ U.S.C. § 3731(b). The statute of limitations provisions of the False Claims Act are discussed in § 9 of LRD 55, supra note 75 .
    ${ }^{113}$ Id.
    ${ }^{114} 31$ U.S.C. § $3730(\mathrm{~b})(2)$, (3), and (4).
    ${ }^{115} 31$ U.S.C. § 3730(b)(5).

[^19]:    ${ }^{116} 31$ U.S.C. § 3732 (c).
    ${ }^{117}$ Section 4(e) of FERA, supra note 79. See also CONG. REC. E1295 to E1300, at E1300 (daily ed. June 3, 2009) (statement of Rep. Berman), available at
    http://www.gpoaccess.gov/crecord/advanced.html; on advanced search page, check boxes for " 2009 CR, Vol. 155" and "Extension of Remarks," specific date on 06/03/2009, search E1295; on results page, click on the underlined letters "pdf" under hit no. 3, Fraud Enforcement and Recovery Act of 2009 (last accessed on Dec. 18, 2011).
    ${ }^{118} 31$ U.S.C. § 3731(c), as enacted by § 4(b) of FERA.
    ${ }^{119}$ United States v. Baylor Univ. Medical Center, 469 F.3d 263 (2d Cir. 2006), cited and discussed in CONG. REC. E1295 to E1300, at E1299 (daily ed. June 3, 2009) (statement of Rep. Berman); text of Rep. Berman's statement, see Cong. Rec. E1295 to E1300, at E1300 (daily ed. June 3, 2009) (statement of Rep. Berman), available at
    http://www.gpoaccess.gov/crecord/advanced.html; on advanced search page, check boxes for "2009 CR, Vol. 155" and "Extension of Remarks," specific date on 06/03/2009, search E1295; on results page, click on the underlined letters "pdf" under hit no. 3, Fraud Enforcement and Recovery Act of 2009 (last accessed on Dec. 18, 2011).
    ${ }^{120} 31$ U.S.C. § 3731(d).
    ${ }^{121} 31$ U.S.C. § 3731(e).

[^20]:    ${ }^{122} 31$ U.S.C. § 3731(a).
    ${ }^{123} 31$ U.S.C. § 3730(e)(4)(A). This provision was enacted by $\S 3$ of the False Claims Amendments Act of 1986, Pub. L. No. 99-562, 100 Stat. 3153; and was subsequently amended in 1990 by Pub. L. No. 101-280 and in 1994 by Pub. L. No. 103-272.
    ${ }^{124}$ S. REP. No. 99-345 (July 28, 1986), cited and reprinted in Sylvia, supra note 105; see Sylvia, at 59 n .30 , and see more generally discussion at 53-60 and App. B-1 of that book.
    ${ }^{125} 31$ U.S.C. § $3730(\mathrm{e})(4)(\mathrm{A})$.
    ${ }^{126} 31$ U.S.C. § $3730(\mathrm{e})(4)(\mathrm{B})$.

[^21]:    ${ }^{127}$ See, e.g., Rockwell Int'l Corp. v. United States, 549 U.S. 457,127 S. Ct. 1397, 167 L. Ed. 2d 190 (2007), and other cases cited and analyzed in Sink \& Pages, supra note 93, at 102-105; and Seyfarth Shaw LLP, The Government Contract Compliance Handbook 20-26 (4th ed., Thomson West 2006).
    ${ }^{128}$ Schindler Elevator Corp. v. United States ex rel. Kirk, 131 S. Ct. 1885; 179 L. Ed. 2d 825 (2011). The case was decided by a 5 to 3 vote, with one abstention. The majority opinion was written by Justice Thomas, in which he was joined by Chief Justice Roberts and Justices Alito, Kennedy, and Scalia. Justice Ginsberg dissented, in which she was joined by Justices Breyer and Sotomayor. Justice Kagan recused herself from participation in the case. The decision reversed a prior decision by the U.S. Court of Appeals for the Second Circuit, United States ex rel. Kirk v. Schindler Elevator Corp., 601 F.3d 94 (2d Cir. N.Y. 2010).
    ${ }^{129}$ Schindler Elevator Corp., 131 S. Ct. 1885 at 1894; and see more broadly discussion at 1894-1896.

[^22]:    ${ }^{130}$ Graham County Soil and Water Conservation Dist. v. United States, 559 U.S. 280, 130 S. Ct. 1396, 176 L. Ed. 2d 225 (2010).
    ${ }^{131}$ The 26 states that have enacted false-claims statutes applicable to transportation construction contracts include Alaska, Arizona, California, Delaware, Florida, Hawaii, Idaho, Illinois, Indiana, Kansas, Louisiana, Massachusetts, Michigan, Minnesota, Montana, Nebraska, Nevada, New Jersey, New Mexico, New York, North Carolina, Ohio, Rhode Island, Tennessee, Virginia, and Wyoming. The municipalities include Chicago, New York City, and Washington, D.C.
    ${ }^{132}$ The 13 states having only Medicaid false claims statutes, and no false claims statutes that would apply to transportation construction projects, include Colorado, Connecticut, Georgia, Kentucky, Missouri, New Hampshire, Oklahoma, Oregon, Texas, Utah, Washington State, West Virginia, and Wisconsin.
    ${ }^{133}$ The 14 states that have enacted false statements statutes include Alabama, Arizona, Colorado, Georgia, Illinois, Iowa, Kentucky, Louisiana, Nebraska, North Dakota, Ohio, Pennsylvania, South Dakota, and West Virginia.
    ${ }^{134}$ The eight states that have false statements statutes, but no false claims statutes applicable to transportation projects, include Alabama, Colorado, Connecticut, Georgia, Iowa, Kentucky, North Dakota, Pennsylvania, South Dakota, and West Virginia.

[^23]:    ${ }^{135}$ See LRD 55, supra note 75, at 45-58.
    ${ }^{136}$ See LRD 55, supra note 75, at 70.
    ${ }^{137}$ See LRD 55, supra note 75, at 69-70.

[^24]:    ${ }^{138}$ See LRD 55, supra note 75, at 71-80.
    ${ }^{139}$ The contract specifications may specifically enumerate "bid documents" as documents that the owner may audit in evaluating the contractor's claim. Florida Standard Specification 5-12.14 and Washington Standard Specification 109.12(3)23 are examples.
    ${ }^{140}$ S. Le Roland Constr. Co. v. Beall Pipe Tank Co., 14 Wash. App. 297, 540 P.2d 912, 917 (1975). Calculating the contractor's damages is discussed in Subpart C of Section 6.
    ${ }^{141}$ Montana, New Jersey, Oregon, South Carolina, and Washington. See Darrell W. Harp, Preventing and Defending Against Highway Construction Contract Claims: The Use of Changed or Differing Site Conditions Clauses and New York State's Use of Exculpatory Contract Provisions and No Claims Clauses (National Cooperative Highway Research Program Legal Research Digest No. 28); Arizona Standard Specification 103.11.
    ${ }^{142}$ The specification may provide that failure to provide the bid documentation as specified will render the bid nonresponsive. Arizona Standard Specification 103.11(E).

[^25]:    ${ }^{143}$ Arizona Standard Specification 103.11(D) (2000).
    ${ }^{144}$ ODOT PN110 (Apr. 12, 2008) escrow bid documents.
    ${ }^{145}$ Arizona Standard Specification 103.11(B).
    ${ }^{146}$ ODOT PN110 (Apr. 12, 2008) escrow bid documents.

[^26]:    ${ }^{147}$ Id.
    ${ }^{148}$ Arizona Standard Specification 103.11(C).
    ${ }^{149}$ ODOT PN110 Escrow Bid Documnents.
    ${ }^{150}$ Associated Gen. Contractors of Wash. v. State, Thurston County Cause No. 86-2-01972-1 (1986).
    ${ }^{151}$ Ch. 42.17, WASH. REV. CODE.
    152 Contractors Challenge Bidding Rule, ENGINEERING NEWs RECORD (Oct. 23, 1986), at 40.
    ${ }^{153}$ The contractor may, however, seek a protective order to protect information that, if disclosed, could harm its competitive position.

[^27]:    ${ }^{154}$ FDOT Specification 5.12.6.2.
    ${ }^{155}$ NYSDOT § 108.04 Delay Provision.

[^28]:    ${ }^{157}$ Sensenbrenner v. Rust, Orling \& Neale, Architects, Inc., 236 Va. 419, 374 S.E.2d 55, 58 (1988).
    ${ }^{158}$ The law dealing with damages, discussed in Subsection C infra, measures how those unfilled expectations may be compensated.
    ${ }^{159}$ See generally Subsection A, supra of this Section.
    ${ }^{160}$ See generally Subsection A, of Section 4.
    ${ }^{161}$ See generally Subsection B, of Section 4; see also 3 SANDS \& Libonati, Local Government Law § 22.05.50 (2000).
    ${ }^{162}$ Clark County Constr. Co. v. State Highway Comm'n, 248 Ky. 158, 58 S.W.2d 388 (Ky. 1933); Architectural Woods, Inc. v. State, 598 P.2d 1372 (Wash. 1979).
    ${ }^{163}$ Dick Enterprises, Inc. v. Department of Transp., 746 A.2d 1164, 1168 (Pa. Commw. 2000); (dispute over the rate of pay for certain excavation that the contract required); R.W. Duntleman Co. v. Village of Lombard, 281 Ill. App. 3d 929, 666 N.E.2d 762, 217 Ill. Dec. 93 (1996) (dispute over whether payment should be made under "pavement removal" or "special excavation").

[^29]:    ${ }^{164}$ Earth Movers v. State, Dep't of Transp., 824 P.2d 715 (Alaska 1992) (dispute over whether the contract gave the contractor the right to erect temporary road closure signs or whether the State could erect them); Western States Constr. v. United States, 26 Cl. Ct. 818 (1992).
    ${ }^{165}$ DiGioia Bros. Excavating v. City of Cleveland, 135 Ohio App. 3d 436, 734 N.E.2d 438 (1999) (dispute over whether the contract was ambiguous in designating responsibility for coping with underground utilities); Central Ohio Vocational Bd. of Educ. v. Peterson Constr. Co., 129 Ohio App. 3d 58, 716 N.E.2d 1210, 1213 (1998) (dispute over the meaning of the term, "Full Depth," in the contract, as it related to the depth of removal of unsuitable material).
    ${ }^{166}$ In some states, the determination as to what the contract requires may be made by a board of claims or by an arbitrator depending on what the law provides as the contractor's "final remedy." See Subsection A.3.b of this Section listing by state the final remedy available to contractors.
    ${ }^{167}$ Metric Constructors, Inc. v. United States, 44 Fed. Cl. 513, 520 (1999).
    ${ }^{168}$ Restatement of Contracts § 201 (2d); 11 Williston on Contracts, § 32:2 (4th ed. 1999) Kass v. Kass, 91 N.Y.2d, 554, 696 N.E.2d 174, 673 N.Y.S.2d 350 (N.Y. 1998); 5 CORBIN ON Contracts, § 24 (rev. ed. 1993); Leo F. Piazza Paving Co. v. Foundation Contractors, Inc., 128 Cal. App. 3d 583, 591, 177 Cal. Rptr. 268 (1981).
    ${ }^{169}$ Hotchkiss v. National City Bank of N.Y., 200 Fed. 287, 293 (S.D. N.Y. 1911), affd, 231 U.S. 50 (1913).
    ${ }^{170}$ Gould, Inc. v. United States, 935 F.2d 1271, 1274 (Fed. Cir. 1991).

[^30]:    ${ }^{171}$ Patterson, The Interpretation and Construction of Contracts, 64 COLUM. L. REV. 833 (listing the maxims of contract interpretation); RESTATEMENT OF CONTRACTS § 203 (2d 1981). Dick Enterprises v. Department of Transp., supra note 103.
    ${ }^{172}$ Hol-Gar Mfg. Corp. v. United States, 169 Ct. Cl. 384, 51 F.2d 972, 974 (Ct. Cl. 1965); Restatement of Contracts § 212(2) (2d 1979).
    ${ }^{173}$ Sylvania Elec. Products, Inc. v. United States, 198 Ct. Cl. 1061, 458 F.2d 994, 1005 (Ct. Cl. 1972); E. Posner, The Parol Evidence Rule, The Plain Meaning Rule and the Principles of Contractual Interpretation, 146 U. PA. L. REV. 533 (1998).
    ${ }^{174}$ R. B. Wright Constr. Co. v. United States, 919 F.2d 1569, 1572-73 (Fed. Cir. 1990) (specification requiring three coats of paints clear and unambiguous; trade practice of applying one coat not relevant).
    ${ }^{175}$ See the Table in this part of the Subsection listing the states that follow the "plain meaning" rule.
    ${ }^{176}$ See the Table referred to in note 116 for the states that follow the "context" rule.
    ${ }^{177}$ Taylor v. State Farm Mut. Auto Ins. Co., 175 Ariz. 148, 854 P.2d 1134, 1138-39 (1993) (citations omitted); see also 3 Corbin on Contracts, § 542 (1992 supp.); Restatement of CONTRACTS § 212 (2d 1981).

[^31]:    ${ }^{178}$ Morton Inter. v. Aetna Cas. \& Sur. Co., 106 Ohio App. 3d 653, 666 N.E.2d 1163, 1170 (Ohio App. 1995) (insured did not participate in drafting endorsement, hence there was no evidence of mutual intent other than the language of the contract).
    ${ }^{179}$ An exception would be technical terms that have a special meaning in the construction trade. See Western States Constr. Co. v. United States, 26 Ct. Cl. 818, 824 (1992).

[^32]:    ${ }^{180}$ See Patterson, The Interpretation and Construction of Contracts, 64 COLUM. L. REV. 833 (1964) (listing the maxims of contract interpretation); RESTATEMENT OF CONTRACTS § 202 (2d 1981).
    ${ }^{181}$ Eurick v. Pemco Ins. Co., 108 Wash. 2d 338, 738 P.2d 251, 252 (1987).

    182 Dick Enters. v. Commw., Dep't of Transp., 746 A.2d 1164, 1170 (Pa. Commw. 2000) (court accepted State's inter-

[^33]:    ${ }^{187}$ Dick Enters. v. Department of Transp., supra note 122, at 1169 .
    ${ }^{188}$ Id. (information on the contract plans resolved apparent conflict between the special provisions and other provisions of the contract relating the types of excavation).
    ${ }^{189}$ See generally E. Patterson, The Interpretation and Construction of Contracts, 64 CoLUM. L. REV. 833 (1964) and Posner, The Parol Evidence Rule, The Plain Meaning Rule, and the Principles of Contractual Interpretation, 146 U. PA. L. REV. 533 (1997), relating to contract interpretation.
    ${ }^{190}$ Dick Enters. v. Dep't of Transp., supra note 122, at 1168. When a contract term is unambiguous, the court cannot give the language another meaning regardless of how reasonable it might be to do so. Triax. Pacific v. West, 130 F.3d 1469 (Fed. Cir. 1997).
    ${ }^{191}$ Dick Enters., Id at 1165, n.1.
    ${ }^{192}$ For an example of an Order of Precedence clause, see 48 C.F.R. § 52.214-29.
    ${ }^{193}$ Pennsylvania DOT Standard Specification § 105.04, referred to in Dick Enters., supra note 122, at 1169.

    194 John A. Volpe Constr. Co. VACAB, 638-68-1 BCA 6857, 31, 705-06 (1968); Scherrer Constr. Co. v. Burlington Memorial Hosp., 64 Wis. 2d 720, 221 N.W.2d 855 (Wis. 1974).
    ${ }^{195}$ Central Ohio Joint Vocational Sch. Dist. v. Peterson Constr., 129 Ohio App. 3d 58, 716 N.E.2d 1210, 1213 (Ohio App. 1998). Restatement of Contracts § 213 (2d 1979), 6

[^34]:    ${ }^{204} 14$ S.W.3d 276, 281 (Mo. App. 2000) (quoting Community Heating \& Plumbing Co. v. Kelso, 987 F.2d 1575, 1580 (Fed. Cir. 1993)) (citations omitted).
    ${ }^{205}$ Missouri Standard Specification, § 105.4.1.
    ${ }^{206}$ Delcon Constr. Corp. v. United States, 27 Fed. Cl. 634, 637 (1993).
    ${ }^{207}$ Hensel Phelps v. United States, 888 F.3d 1296 (Fed. Cl. 1989).
    ${ }^{208}$ J.F. White v. Mass. Bay Transp. Auth., 40 Mass. App. Ct. 937, 666 N.E.2d 518, 519 (1996); Wildner Contracting v. Ohio Turnpike Comm'n, 913 F. Supp. 1031 (N.D. Ohio 1996); Hensel Phelps Constr. Co. v. King County, 57 Wash. App. 170, 787 P. $2 d$ 58, 61 (1990); Hoel-Steffen Constr. Co. v. United States, 197 Ct. Cl. 561, 456 F.2d 760 (Ct. Cl. 1972).
    ${ }^{209} 11$ CORBIN ON CONTRACTS § 992 (1993 int. ed); 24 WILLISTON ON CONTRACTS § 64:1 (4th ed. 1999).
    ${ }^{210}$ Bruce Constr. Corp. v. United States, 163 Ct. Cl. 97, 324 F.2d 516, 518 (Ct. Cl. 1963); Pacific Architects \& Engineers v. United States, 203 Ct. Cl. 499, 491 F.2d 734, 739 (Ct. Cl. 1974).

[^35]:    ${ }^{211}$ Damages are discussed in Subsection C of this Section.
    ${ }^{212}$ State v. Eastwind, Inc., 851 P.2d 1348, 1350 (Alaska 1993) (requiring the contractor to perform work in a manner different than called for in the contract); Hubbard Constr. Co. v. Orlando/Orange County Expressway Auth., 633 So. 2d 1154 (App. Div. 5 Dist. 1994) (imposing a stricter standard to test the density of a highway embankment than required by the contract); APAC Georgia, Inc. v. Department of Transp., 221 Ga. App. 601, 472 S.E.2d 97, 100-01 (1996) (failure to coordinate design changes between prime contractors as required by an express provision in the contract); D.H. Blattner \& Sons v. Fireman's Ins. Co., 535 N.W.2d 671, 675-77 (Minn. App. 1995) (breach of implied warranty as to the correctness of the plans and specifications-following United States v. Spearin, 248 U.S. 132 (1918)); Beltrone Constr. Co. v. State, 256 A.D. 2d 992, 682 N.Y.S.2d 299 (1998) (failure to coordinate concurrent prime contractors); Chantilly Constr. Corp. v. Department of Highways, 6 Va. App. 282, 369 S.E.2d 438, 444 (1988) (defective specifications); Zook Bros. Constr. Co. v. State, 171 Mont. 64, 556 P.2d 911, 915 (1976) (failure to provide right-of-way); Gilbert Pacific Corp.v. State Dep't of Transp., 110 Or. App. 171, 822 P.2d 729, 732 (1991) (defective plans and specifications); Procon Corp. v. Utah Dep't of Transp., 876 P.2d 890 (Utah App. 1994) (changing the angle of a cut in a highway embankment from that shown in the plans was a breach); John W. Goodwin, Inc. v. Fox, 1994 Me. 33, 725 A.2d 541 (1999) (failure to make timely progress payments).
    ${ }^{213}$ See generally Section 5, Subsections A (The Changes Clause) and B (Differing Site Conditions).

[^36]:    214 Jensen Constr. Co. v. Dallas County, 920 S.W.2d 761, 772 (Tex. App. 1996).
    ${ }^{215}$ Del Guzzi Constr. Co. v. Global Northwest, Ltd. 105 Wash. 2d 878, 719 P.2d 120, 125 (1986); Tarin v. Tinley, 3 P.2d 680 (N.M. App. 1999); Linde Enters., Inc. v. Hazelton City Auth., 412 Pa. Super. 67, 602 A.2d 897, 899 (1992); Lundeen Coatings Corp. v. Department of Water \& Power, 232 Cal. App. 3d 816, 833, 283 Cal. Rptr. 551 (Cal. App. 1991).
    ${ }^{216}$ Howard Contracting, Inc. v. G.A. MacDonald Constr. Co., 71 Cal. App. 4th 38, 60, 83 Cal. Rptr. 2d 590 (1998). See also Buckley \& Co. v. State, 140 N.J. Super. 289, 356 A.2d 56, 73 (1975), for cases from other jurisdictions holding that lack of privity between the subcontractor and the owner does not bar a pass-through claim. A pass-through claim was not allowed, however, where sovereign immunity was only waived with respect to parties who had contracted directly with the state. APAC-Carolina v. Greensboro-High Point Airport Auth., 110 N.C. App. 664, 431 S.E.2d 508, 511 (1993).

[^37]:    ${ }^{217}$ Severin v. United States, 99 Cl. Ct. 435, 443 (1943); cert. denied, 322 U.S. 733, 645 Ct. 1045 (1944); see also Department of Transp. v. Claussen Paving Co., 346 Ga. 807, 273 S.E.2d 161, 164 (Ga. 1980); Kensington Corp. v. Department of State Highways, 74 Mich. App. 417, 253 N.W.2d 781, 783 (1977); John B. Pike \& Son, Inc. v. State, 169 Misc. 2d 1037, 647 N.Y.S.2d 654 (N.Y. Ct. Cl. 1996).
    ${ }^{218}$ J. L. Simmons v. United States, 304 F.2d 886, 888 (Ct. Cl. 1962).
    ${ }^{219} 171$ Ct. Cl. 478, 346 F.2d 962, 965 (Ct. Cl. 1965).
    ${ }^{220}$ The majority view is that the Severin defense is an affirmative defense and as such the owner has the burden of proof, not the contractor. Frank Coluccio Constr. v. City of Springfield, 779 S.W.2d 550, 552 (Mo. 1989); Gilbert Pacific Corp. v. State Dep't of Transp., 110 Ore. App. 171, 822 P.2d 729 (1991). But in Department of Transp. v. Claussen Paving Co., 246 Ga. 807, 273 S.E.2d 161 (1980), the court held that the prime contractor has the burden of proving that it is liable to the subcontractor.
    ${ }^{221}$ Owens-Corning Fiberglass Corp. v. United States, 190 Ct. Cl. 211, 419 F.2d 439, 457 (Ct. Cl. 1969), University of Alaska v. Modern Constr., Inc., 522 P.2d 1132, 1139 (Alaska 1974); Buckley \& Co. v. State, Dep't of Transp., 140 N.J. Super. 289, 356 A.2d 56, 73 (1975).

[^38]:    ${ }^{222}$ Form No. 5, Associated General Contractors of America (AGC).
    ${ }^{223}$ Umpqua River Nav. Co. v. Cresent City Harbor Dist., 618 F.2d 588, 594 (9th Cir. 1980).
    ${ }^{224}$ Keith A. Nelson Co. v. R.L. Jones, Inc., 604 S.W.2d 351, 354 (Texas 1980) (no changed conditions clause in subcontract; subcontractor could not recover for changed conditions).
    ${ }^{225}$ John B. Pike \& Son, Inc. v. State, 169 Misc. 2d 1034, 647 N.Y.S.2d 654, 656 (1996).
    ${ }^{226}$ Pa. Dep’t of Transp. v. James D. Morrissey, Inc., 682 A.2d 9, 16 (Pa. 1996) (8 percent markup allowed).
    ${ }^{227}$ Aloe Coal Co. v. Department of Transp., 164 Pa . Commw. 453, 643 A. 2 d 757 (1994); 230 Park Ave. Assocs. v. State, 165 Misc. 2d 920, 630 N.Y.S.2d 855 (1995); J.A. Sullivan Corp. v. Commw., 397 Mass. 789, 494 N.E.2d 374, 377 (1986); 5 WILLISTON CONTRACTS, § 805 (1970).
    ${ }^{228}$ Leroy Callender, P.C. v. Fieldman, 252 A.D. 2d 468, 676 N.Y.S.2d 152, 153 (1998). Subcontractors may try to assert this type of claim when they have not been paid by the prime contractor for their work, but there is no unjust enrichment when the owner has paid the prime contractor, since equity will not require the owner to pay twice. International Paper Co. v. Futhey, 788 S.W.2d 303, 306 (Mo. App. 1990).

[^39]:    ${ }^{238}$ National Presto Indus. v. United States, 167 Ct. Cl. 749 338 F.2d 99, 111-12 (Ct. Cl. 1964); see also Atlas Corp. v. United States, 895 F.2d 745, 750 (Fed. Cir. 1990) (court denied contractor's claim based on mutual mistake).
    ${ }^{239}$ Westinghouse Elec. Corp. v. United States, 41 Fed. Cl. 229, 238 (1998); RESTATEMENT OF CONTRACTS § 151 (2d).
    ${ }^{240}$ Knieper v. United States, 38 Fed. Cl. 128, 139-40 (1997); Restatement of Contracts § 152 (2d).
    ${ }^{241}$ The term subcontractors as used in this Subsection also refers to materialmen.
    ${ }^{242}$ Wells-Stewart Constr. Co. v. Martin Marrietta Corp., 103 Ariz. 375, 442 P.2d 119, 124 (Ariz. 1968); J.S. Sweet Co. v. White County Bridge, 714 N.E.2d 219, 222 (Ind. App. 1999).
    ${ }^{243}$ City of Evansville v. Verplank Concrete \& Supply, 400 N.E.2d 812, 816 (Ind. Ct. App. 1980).
    ${ }^{244}$ Payment bond provides protection to those who furnish materials and services for public improvements. Davidson Pipe Supply v. Wyoming County Inds. Dev. Agency, 85 N.Y.2d 281, 648 N.E.2d 468, 469-70, 624 N.Y.S.2d 92 (1995); Retainage: city not liable to unpaid subcontractor for failure to withhold retainage from prime contractor's progress payments. Murname Assocs. v. Harrison Garage Parking Corp., 239 A.D. 2d 882, 659 N.Y.S.2d 665, 667 (N.Y. A.D. 1997).
    ${ }^{245}$ OR. REV. Stat. § 279.542.
    ${ }^{246}$ WASH. REV. CODE § 39.08.010 does not impose liability on state agencies, but rather only on counties, cities, and towns.

[^40]:    ${ }^{260}$ Floor Craft Floor Covering, Inc. v. Parma Community Gen. Hosp., 54 Ohio St. 3d 1, 560 N.E.2d 206, 208 (Ohio 1990); Berschauer/Phillips Constr. Co. v. Seattle Sch. Dist., 124 Wash. 2d 816, 881 P.2d 986, 989-90 (1994).
    ${ }^{261}$ Sensenbrenner v. Rust/Orling \& Neale, 374 S.E.2d at 58; Berschauer/Phillips Constr. Co., id.
    ${ }^{262}$ Id.
    ${ }^{263}$ Berschauer-Phillips Constr. Co., 881 P.2d at 992.
    ${ }^{264}$ Insurance Co. of North America v. Town of Manchester, 17 F. Supp. 2d 81, 86 (D. Conn. 1998).

[^41]:    ${ }^{265} 476$ U.S. 858, 868-69, 106 S. Ct. 2295, 90 L. Ed. 2d 865 (1986), cited in Maeda Pacific. Corp. v. GMP Hawaii, Inc., 2011 Guam 20; 2011 Guam LEXIS 20 (Nov. 17, 2011).
    ${ }^{266} 2008$ U.S. Dist. LEXIS 93754 (D. Vt., Nov. 3, 2008).

[^42]:    ${ }^{268} 2010$ U.S. Dist. LEXIS 6077 (U.S. Dist. Ct. ND W. Va. 2010).
    ${ }^{269} 2009$ U.S. Dist. LEXIS 112931 (U.S. Dist. Ct. SD Miss. 2009).

[^43]:    ${ }^{270}$ Entitlement may be based upon breach of contract or upon some remedy granting provision of the contract. See generally, subsection B, supra.
    ${ }^{271} \mathrm{Al}$ and Zack Brown, Inc. v. Bullock, 238 Ga. App. 246, 518 S.E.2d 458, 461 (1999); 11 CORBIN ON CONTRACTS, § 992 (1993 int. ed.). 24 WILLISTON ON CONTRACTS § 64:1 (4th ed. 1999).
    ${ }^{272}$ Bruce Constr. Corp. v. United States, 163 Ct. Cl. 97, 324 F.2d 516, 518 (Ct. Cl. 1963); Morrison Knudsen Corp. v. Fireman's Fund Ins. Co., 175 F.3d 1221, 1234 n. 8 (10th Cir. 1999).
    ${ }^{273}$ D.C. v. Organization for Envtl. Growth, 700 A.2d 185, 203 (D.C. App. 1997) (quoting Modern Foods, Inc., ASBCA No. 2090, 57-1 BCA II 1229, 1957 WL 4960).

[^44]:    ${ }^{274}$ Pacific Architects and Eng'rs Inc. v. United States, 203 Ct. Cl. 499, 491 F.2d 734, 739 (Ct. Cl. 1974); Nager Elec. Co. v. United States, 194 Ct. Cl. 835, 442 F.2d 936, 946 (Ct. Cl. 1971).
    ${ }^{275}$ See Joseph Pickark's Sons Co. v. United States, 209 Ct. Cl. 643, 532 F.2d 739, 742-44 (1976).
    ${ }^{276}$ The DSC clause mandated by FHWA for use on feder-ally-aided state highway projects contains the same limitation. 23 C.F.R. § 635.109(a)(1)(iv).
    ${ }^{277} 23$ C.F.R. § 635.109(a)(2)(ii).
    ${ }^{278}$ J.F. White v. Mass. Bay Transp. Auth., 40 Mass. App. Ct. 937, 666 N.E.2d 518 (1996); Hensel Phelps Constr. Co. v. King County, 57 Wash. App. 170, 787 P.2d 58, 65 (1990).
    ${ }^{279}$ V.C. Edwards Contracting Co. v. Port of Tacoma, 83 Wash. 2d 7, 514 P.2d 1381, 1383 (1973); Triple Cities Constr. Co. v. State, 194 A.D. 2d 1037, 599 N.Y.S.2d 874, 876 (1993). See also § 5.A.5, "Cardinal Changes," supra.
    ${ }^{280}$ See cases cited in note 278 supra.
    ${ }^{281}$ V.C. Edwards, supra note 215, 514 P.2d at 1383-84.
    ${ }^{282}$ Foster Constr. C.A. Co. and Williams Bros. v. United States, 193 Ct. Cl. 587, 435 F.2d 873, 880 (Ct. Cl. 1970).
    ${ }^{283}$ Hensel Phelps Constr. Co., supra note 214, 787 P.2d at 61-62.

[^45]:    ${ }^{284}$ See § 5.C.4., supra.
    ${ }^{285}$ See, e.g., Washington Standard Specification 1-09.4 (no claim for consequential damages of any kind will be allowed).
    ${ }^{286}$ Canal Elec. Co. v. Westinghouse Elec. Co., 406 Mass. 369, 548 N.E.2d 182, 187 (Mass. 1990); Solar Turbines, Inc. v. United States, 23 Ct. Cl. 142, 157 (1991). See also the limitations on the use of no-pay-for-delay clauses discussed in Section 5.C, supra.

    28711 CORBIN ON CONTRACTS, § 992; 24 WILLISTON ON CONTRACTS, § 64:1 (4th ed. 1999), 1353 (3d ed. 1968).
    ${ }^{288}$ Berley Indus. v. City of N.Y., 45 N.Y.2d 683, 688, 385 N.E.2d 281, 283, 412 N.Y.S.2d 589 (1978).

[^46]:    ${ }^{289}$ Wunderlich Contracting Co. v. United States, 173 Ct. Cl. 180, 351 F.2d 956, 968-69 (Ct. Cl. 1965).
    ${ }^{290}$ Daly Constr. v. Garrett, 5 F.3d 520, 522 (Fed. Cir. 1993).
    ${ }^{291}$ Wunderlich Contracting Co., supra, note 225, 351 F.2d at 968-69.
    ${ }^{292}$ P.T. \& L. Constr. Co. v. State Dep’t of Transp., 108 N.J. 539, 531 A.2d 1330, 1335 (1987) (contractor must absorb expenses that would have been avoided if it had been conscientious in its investigation).
    ${ }^{293}$ Hardwick v. Dravo Equip. Co., 279 Or. 619, 569 P.2d 588, 591 (1977).
    ${ }^{294}$ Wunderlich Contracting Co., supra note 225, at 969; Berley Indus., 385 N.E.2d at 282-83.
    ${ }^{295}$ Bruce Constr. Corp. v. United States, 163 Ct. Cl. 97, 324 F.2d 516, 519 (Ct. Cl. 1963).
    ${ }^{296} 48$ C.F.R. § 31.201 .3 (1987). See Morrison Knudsen Corp. v. Fireman's Fund Ins. Co., 175 F.3d 1221, 1244, n. 30 (10th Cir. 1999).
    ${ }^{297}$ Pa. Dep't of Transp. v. United States, 226 Ct. Cl. 444, 643 F.2d 758, 763 (1981).
    ${ }^{298} 13$ AM. JUR. Building and Construction Contracts § 122 (2d ed. 2000).
    ${ }^{299}$ See Subsection B.5.a, supra.
    ${ }^{300}$ BLACK’S LAW DICTIONARY (7th ed. 1999).

[^47]:    ${ }^{301}$ V.C. Edwards Contracting Co. v. Port of Tacoma, 7 Wash. App. 883, 503 P.2d 1133, 1136 (1972).
    ${ }^{302}$ Ridley v. Pipe Maintenance Services, 83 Pa . Commw. 425, 477 A.2d 610, 612 (1984) (invalid contract).
    ${ }^{303}$ Cities Serv. Gas Co. v. United States, 205 Ct. Cl. 16, 500 F.2d 448, 457 (Ct. Cl. 1974); Port Chester Elec. Constr. Corp. v. HBE Corp., 782 F. Supp. 837, 845 (S.D. N.Y. 1991).
    ${ }^{304}$ Hensel Phelps Constr. Co. v. King County, 57 Wash. App. 170, 787 P.2d 58, 61 (1990).
    ${ }^{305} \mathrm{Id}$.
    ${ }^{306}$ American Line Builders v. United States, 26 Cl. Ct. 1155, 1193 (1992) ("Plaintiff's calculation of the additional work required by reference to time and labor records from the project is far more helpful to this court than the defendant's unsupported assertions, because plaintiff's calculations reflect work actually performed, not hypothetical labor time projects.").
    ${ }^{307}$ Dawco Constr. Co. v. United States, 930 F.2d 872, 882 (Fed. Cir. 1991); American Line Builders Inc., id.; Con-Vi-Rio of Texas v. United States, 538 F.2d 348 (Cl. Ct. 1976); D.C. v. Organization for Envtl. Growth, 700 A.2d 185, 203 (D.C. App. 1997); New Pueblo Constructors, Inc. v. State, 144 Ariz. 95, 696 P.2d 185, 194 (1985).

[^48]:    ${ }^{308}$ Dawco Constr. Co. v. United States, 930 F.2d at 882.
    ${ }^{309}$ New Pueblo Constructors, Inc. v. Department of Transp., 696 P.2d at 194; Neal \& Co. v. United States, 36 Fed. Cl. 600, 638 (Ct. Cl. 1996); Servidone Constr. Corp. v. United States, 931 F.2d 860, 861-62 (Fed. Cir. 1991).
    ${ }^{310}$ New Pueblo Constructors, id.; Green Constr. Co. v. Department of Transp., 164 Pa . Commw. 566, 643 A.2d 1129, 1136 (1994); Servidone Constr. Corp., id.; Modern Builders, Inc. v. Manke, 29 Wash. App. 86, 615 P.2d 1332, 1337-38 (1980), Huber, Hunt Nichols v. Moore, 67 Cal. App. 278, 136 Cal. Rptr. 603, 621-22 (1977).
    ${ }^{311}$ Youngdale \& Sons Constr. Co. v. United States, 27 Fed. Cl. 516, 541 (1993); Servidone Constr. Corp., 931 F.2d at 861.
    ${ }^{312}$ See cases cited in note 245, supra. See also McBride \& Touhey, Government Contracts, § 23.40[2].
    ${ }^{313}$ AMP-Rite Elec. Co. v. Wheaton Sanitary Dist., 220 Ill. App. 3d 130, 580 N.E.2d 622, 640, 162 Ill. Dec. 659 (1991).

[^49]:    ${ }^{314}$ Youngdale \& Sons Constr. Co. v. United States, 27 Fed. Cl. 542-43.
    ${ }^{315}$ Servidone Constr. Corp., 931 F.2d at 861-62.
    ${ }^{316}$ AMP-Rite Elec. Co., 580 N.E.2d at 641 (citing J.D. Hedin Constr. Co. v. United States, 347 F.2d 235, 346-47 (Ct. Cl. 1965); Neal \& Co. v. United States, 36 Fed. Cl. at 638. The contractor does not have the burden, however, to show that it mitigated its damages; the burden of proving that the contractor failed to mitigate its damages rests with the owner. Hardwick v. Dravo, 279 Or. 619, 569 P.2d 588, 591 (1977).
    ${ }^{317}$ John F. Harkins Co. v. School Dist. of Phila., 313 Pa., supra 425, 460 A.2d 260, 265 (1983).
    ${ }^{318}$ Neal \& Co. v. United States, 36 Fed. Cl. at 638.
    ${ }^{319}$ Geolar, Inc. v. Gilbert/Commwealth, Inc., 874 P.2d 937, 945 (Alaska 1994); Anchorage v. Frank Coluccio Constr. Corp., 826 P.2d 316, 328 (Alaska 1992).
    ${ }^{320}$ See Pa. Dep't of Transp. v. James D. Morrissey, 682 A.2d 9, 14 (Pa. 1996). (The court noted that the agency did not present any evidence to contradict the contractor's testimony concerning liability for damages). The total cost method may be used to calculate damages for a major contract item. See S.J. Groves \& Sons \& Co. v. State, 50 N.C. App. 1, 77-79, 273 S.E.2d 465 (1980) (contractor used total cost method to calculate damages for unclassified excavation work after encountering a changed condition. Court applied same foundational prerequisites for repricing the entire contract on a total cost basis in repricing major contract item).

[^50]:    ${ }^{321}$ Neal \& Co. v. United States, 36 Fed. Cl. 600, 641 (Fed. Cl. 1996).
    ${ }^{322}$ Columbia Asphalt Corp v. State, 70 A.D. 2d 133, 420 N.Y.S.2d 36 (1979).
    ${ }^{323} 69$ A.D. 2d. 362, 419 N.Y.S.2d 773 (1979).
    ${ }^{324}$ Servidone Constr. Co. v. United States, 931 F.2d at 862; Youngdale Constr. Co. v. United States, 27 Fed. Cl. at 541; Seattle Western Indus. v. David Mowat Co., 750 P.2d 245 (Wash. 1988); Nebr. Pub. Power Dist. v. Austin Power, Inc., 773 F.2d 960, 968 (8th Cir. 1985).
    ${ }^{325}$ For example, in State Highway Comm'n v. Brasel \& Sims Constr. Co., 688 P.2d 871 (Wyo. 1984), damages were reduced by a deduction for increased labor costs due to "overmanning."
    ${ }^{326}$ Servidone Constr. Co. v. United States, 931 F.2d at 862.
    ${ }^{327}$ Youngdale \& Sons Constr. Co. v. United States, 27 Fed. Cl. at 541.
    ${ }^{328}$ See Subpart C.3, "Damage Principles," this Section, supra.

[^51]:    ${ }^{329}$ D. HARP, Preventing and Defending Against Highway Construction Contract Claims: The Use of Changes or Differing Site Conditions Clauses and New York State's Use of Exculpatory Contract Provisions and Contract Clauses, in SELECTED Studies in Highway Law (National Cooperative Highway Research Program, Legal Research Digest No. 28, 1993).
    ${ }^{330}$ Id. at 29.
    ${ }^{331}$ See § 5.C.4.b, supra.
    ${ }^{332}$ Neal \& Co. v. United States, 36 Fed. Cl. at 638.
    ${ }^{333}$ Youngdale \& Sons Constr. Co. v. United States, 27 Fed. Cl. at 541.
    ${ }^{334}$ District of Columbia v. OFERGO, 700 A.2d at 204; Delco Elec. Corp. v. United States, 17 Ct. Cl. 302, 323-24 (1989), aff'd, 909 F.2d 1495 (Fed. Cir. 1990).

[^52]:    ${ }^{335}$ WRB Corp. v. United States, 183 Ct. Cl. 409, 425.
    ${ }^{336}$ Dawco Constr., Inc. v. United States, 930 F.2d 872, 881 (Fed. Cir. 1991); see D.C. v. OFERGO, 700 A.2d at 204 (for additional citations).
    ${ }^{337}$ Colorado DOT Standard Specification 109.4 (1999) and Washington DOT Standard Specification 1-09.6 (2000) are examples.
    ${ }^{338}$ I.A. Constr. Corp. v. Department of Transp., 139 Pa. Commw. 509, 591 A.2d 1146, 1149-50 (1991); Department of Transp. v. Anjo Constr. Co., 666 A.2d 753, 760 (Pa. Commw. 1995).
    ${ }^{339}$ Pricing equipment is discussed in the next subpart C.

[^53]:    ${ }^{340}$ "Construction Claims and Damages, Entitlement Analysis," J. Hainline, AASHTO Annual Meeting (Oct. 1991); TRB Legal Workshop (July 1992).
    ${ }^{341}$ NYSDOT Standard Specifications § 109-05.3.
    ${ }^{342} 177$ Ct. Cl. 676, 369 F.2d 701 (1966).

[^54]:    ${ }^{343}$ WILLIAM Schwartzkopf, Calculating Loss of Labor Productivity in Construction Claims 194 (Aspen Pub., 2004). See also Gen. Ins. Co. v. Hercules Constr. Co., 385 F.2d 13, 20-21 (8th Cir. 1967); and see Clark Concrete Contractors v. Gen. Services Admin., GSBCA No. 14340 99-1 BCA § 30280 (1999) (Board allowed contractor to use the "measured mile" approach to several different categories of work affected by design changes made during construction).
    ${ }^{344} 347$ F. Supp. 17 (W.D. Mo. 1972).
    ${ }^{345}$ ASBCA Nos. 49,399 and 40,300, 01-2 BCA (CCH) 31,428 (2001).
    ${ }^{346}$ Schwartzkopf, supra note 342, at 200.
    ${ }^{347} 187 \mathrm{Cal}$ App. 3d 25, 231 Cal. Rptr. 382 (1986).
    ${ }^{348}$ Cases and Board Decisions on Cumulative Impact Claims, Construction Lawyer 32 (Fall 2011).

[^55]:    ${ }^{349}$ Youngdale \& Sons Constr. Co. v. United States, 27 Fed. Ct. at 558.
    ${ }^{350}$ Luria Bros. \& Co. v. United States, 177 Ct. Cl. 676, 369 F.2d 701, 712 (Ct. Cl. 1967).
    ${ }^{351}$ J.A. HANERS \& R.M. MORGAN, COLD REgions Research and Engineering Laboratory Special Report 172 (May 1972) discusses the effect of cold weather on human performance and capabilities; Work Efficiency Decreases at Abnormal Temperatures, CONSTRUCTOR MAGAZINE, Associated General Contractors of America (May 1972). This issue also lists a number of conditions that affect productivity and characterize the percent of loss if the condition is minor, average, or severe. Some examples: very hot or very cold weather, minor (10 percent), average (20 percent), severe (30 percent). Learning curve, minor ( 5 percent), average ( 15 percent), severe ( 25 percent). The publication notes that these factors are for reference only and may vary from contractor to contractor, crew to crew, and job to job.
    ${ }^{352}$ Manshul Constr. Corp. v. Domitory Auth. of N.Y., 79 A.D. 2d 383436 N.Y.S.2d 724, 729 (N.Y. App. 1981); Joseph Pickard's Sons \& Co. v. United States, 209 Ct. Cl. 643, 532 F.2d 739, 449 (Ct. Cl. 1976).
    ${ }^{353}$ Hensel Phelps Constr. Co. v. King County, 57 Wash. App. 170, 787 P.2d 58, 60 (1990).
    ${ }^{354}$ Public Constructors v. State, 55 A.D. 2d 368, 390 N.Y.S.2d 481, 487 (1977).

[^56]:    ${ }^{355}$ Gardner Displays Co. v. United States, 346 F.2d 585, 589 (Ct. Cl. 1965).
    ${ }^{356} I d$.
    357 See FHWA, CONTRACT ADMINISTRATION CORE

[^57]:    ${ }^{377}$ Eichleay Corp., supra note 298; Melka Marine, Inc. v. United States, 187 F.3d 1370, 1374-75 (Fed. Cir. 1999). It is the accepted method for calculating home office overhead damages in federal construction contracts. Wickham Contracting Co. v. Fischer, 12 F.3d at 1577.
    ${ }^{378}$ From 1960 to the present. Id.

[^58]:    ${ }^{379}$ Golf Landscaping, Inc. v. Century Constr. Co., 39 Wash. App. 895, 696 P.2d 590, 593-94 (1984) (emphasis in original, citation omitted) (using the actual period of performance instead of the original contract period changed the per diem rate from $\$ 209.88$ to $\$ 109.98$ ).
    ${ }^{380}$ West v. All State Boiler, 146 F. 3 at 1368, 1381 (Fed. Cir. 1998) (changed the period for computing damages from 58 days-the suspension period-to 22 days, the extension period beyond the scheduled completion date).
    ${ }^{381}$ Mecka Marine, Inc. v. United States, 187 F.3d at 1379.
    ${ }^{382}$ See West v. All State Boiler, 146 F.3d at 1373. However, a contractor's inability to take on replacement work because of bonding limitations would not be an excuse for not obtaining replacement work. See Satellite Elec. Co. v. Dalton, 105 F.3d 1418, 1420 (Fed. Cir. 1997).

[^59]:    ${ }^{383}$ Community Heating \& Plumbing Co. v. Kelso, 987 F.2d 1575, 1580-81 (Fed. Cir. 1993); Almayer v. Johnson, 79 F.3d 1129, 1133 (Fed. Cir. 1996).
    ${ }^{384}$ Berley Indus. v. City of N.Y., 45 N.Y.2d 683, 385 N.E.2d 281, 283, 412 N.Y.S.2d 589 (1978).

    385 California: Howard Contracting, Inc. v. McDonald Constr. Co., 71 Cal. App. 4th 38, 54-55, 83 Cal. Rptr. 2d 590 (1998) (City of Los Angeles conceded that Eichleay was the proper industry standard for analyzing construction delay claims); Connecticut: Southern New England Contracting Co. v. State, 165 Con. 644, 345 A.2d 550, 559-60 (Conn. 1974); Florida: Broward County v. Russell, Inc., 589 So. 2d 983 (Fla. App. 1991); Massachusetts: PDM Plumbing \& Heating, Inc. v. Findlen, 13 Mass. App. Ct. 950, 431 N.E.2d 594, 595 (1982); Ohio: Conti Corp. v. Ohio Dep't of Adm. Servs., 629 N.E.2d 1073, 1077 (1993); Washington: Golf Landscaping v. Century Constr. Co., 39 Wash. App. 395, 696 P.2d 590, 592-93 (1984). Virginia: Fairfax County Redevelopment and Housing Auth. v. Worchester Bros. Co., 257 Va. 382, 514 S.E.2d 147, 150-51 (1999).
    ${ }^{386}$ Berley Indus. v. City of N.Y., 385 N.E. at 284; D. Harp, Preventing and Defending Against Highway Construction Claims (National Cooperative Highway Research Program Legal Research Digest No. 28, 1993); R.A. Maus, Assessing Damages on Construction Claims, paper presented at AASHTO annual meeting (1991); M.K. Love, Theoretical Delay and Overhead Damages, 30 PuB. Cont. L.J. 33 (Fall 2000); Watson,

[^60]:    ${ }^{393}$ Standard Specification 109.10 (1999).
    ${ }^{394}$ See Reliance Ins. Co. v. United States, 931 F.2d 863, 865 (Fed. Cir. 1991) (10 percent overhead on first $\$ 20,000,71 / 2$ percent overhead on next $\$ 30,000$, and 5 percent overhead on balance over $\$ 50,000$ ).
    ${ }^{395}$ See e.g., Manshul Constr. Corp. v. Dormitory Auth. of New York, 79 A.D. 2d 383, 436 N.Y.S. 724, 730 (1981). Based on proof, the following formula was used: (1) total home office overhead, (2) minus the amount of home office overhead allocated to other contracts, and (3) multiplied by the percentage of the owner's liability as determined by the jury (hence 75 percent) for delaying completion beyond the contract completion date.
    ${ }^{396}$ Melka Marine, Inc. v. United States, 187 F.3d 1370, 1376-77 (Fed. Cir. 1999).

[^61]:    ${ }^{397}$ A changes clause may entitle a contractor to an equitable adjustment for the effect that a change has upon unchanged work. However, under most DSC clauses-an exception is the standard federal construction clause-impact costs are not allowed. See Subsections A and B of § 5, supra.
    ${ }^{398}$ See Subsection 5.C.3, supra.
    ${ }^{399}$ Smith v. United States, 34 Fed. Cl. 313, 326 (1995). The only federal construction case where "ripple" damages were allowed is Ingalls Shipbuilding Div., ASBCA No.17579, 78-1 BCA II 13,038 (1978). Recovery was permitted only because of the specific language contained in the Suspension of Work clause. Smith v. United States, 34 Fed. Cl. at 326.

[^62]:    ${ }^{400}$ See Subsection 5.C.2.C, supra .

[^63]:    ${ }^{401}$ Haney v. United States, 230 Ct. Cl. 148, 676 F.2d 584, 595 (Ct. Cl. 1982) (describing the critical path method). The durations shown in the schedule to perform critical activities shows early and late starts and early and late finishes for those activities. Any additional or spare time between the time necessary to complete the activity on schedule is usually referred to as float time, but using up the float will not delay the scheduled completion of that activity. One view is that neither the contractor nor the owner own float; it exists for the benefit of the project and is available to either party. The owner can issue a change order, but does not need to grant a time extension if the duration of the float is adequate to cover the change. The contractor can use the float as needed to reallocate resources.
    ${ }^{402}$ Bar charts do not depict the interdependencies between critical activities, a feature necessary in scheduling work in large, complex projects involving numerous activities.
    ${ }^{403}$ Harp, supra note 263, at 35-36.

[^64]:    ${ }^{404}$ Neal \& Co. v. United States, 36 Fed. Cl. 600, 643-44 (1996).
    ${ }^{405}$ The as-built schedule is a historical fact. It shows how the project was actually constructed and is prepared from project records and interviews with project personnel. The asplanned schedule is a projection of what the contractor thought would occur with respect to construction of the project, and not a historical fact like the as-built schedule. The but-for schedule depicts how the project would have been constructed but for the owner's delays. See Youngdale \& Sons Constr. Co. v. United States, 27 Fed. Cl. 516, 550-51 (1993).
    ${ }^{406}$ Concurrent delay is discussed in § 5.C.2.d.
    ${ }^{407}$ Edwin J. Dobson, Jr. v. Rutgers, State Univ., 157 N.J. Super, 357, 384 A.2d 1121 (1978).

[^65]:    ${ }^{408}$ Santa Fe Eng'rs, ASBCA Nos. 24578, 25838, and 28687, 94-2 BCA II 26,872 , at 133,753 (1994).

[^66]:    ${ }^{413}$ The Standard Specifications used by Colorado (Spec. 109.10 (1999)), Florida (Spec. 5-12.10 (2000)) and Washington (Spec. 1-09.4.4 (2000)) are examples of this type of clause.
    ${ }^{414}$ The clause may enumerate the kinds of consequential damages that are barred. For example, the Florida Standard Specification (5-12.9) provides that there is no liability for consequential damages including, but not limited to: loss of bonding capacity, loss of bidding opportunities, loss of credit standing, loss of financing, insolvency, loss of other work, cost of financing, and interest paid on money borrowed to finance the job.
    ${ }^{415}$ AASHTO § 109.09 B.
    ${ }^{416}$ Gevyn Constr. Corp. v. United States, 827 F.2d 752, 754 (Fed. Cir. 1987); Bell v. United States, 186 Ct. Cl. 189, 404 F.2d 975, 984 (Ct. Cl. 1968); Drano Corp. v. United States, 594 F.2d 842, 847 (Ct. Cl. 1979); Westland Constr. Co v. Chris Berg, Inc., 35 Wash. 2d 284, 215 P.2d 683, 690 (1950). But see 48 C.F.R. § 102.
    ${ }^{417}$ Gevyn Constr. Corp. v. United States, 827 F.2d at 75354.
    ${ }^{418}$ Neb. Public Power Dist. v. Austin Power, Inc., 773 F.2d 960, 973 (8th Cir. 1985).
    ${ }^{419}$ Neb. Public Power, id.; Cal-Val Constr. Co. v. Mazur, 636 S.W.2d 391, 392 (Mo. App. 1982).

[^67]:    ${ }^{420}$ State Highway Comm'n v. Brasel \& Sims Constr. Co., 688 P.2d 871 (Wyo. 1984).
    ${ }^{421}$ A claim is liquidated when the amount of the claim can be determined without reliance on opinion or discretion, Simes Constr. Co. v. Wash. Public Power Supply System, 28 Wash. App. 10, 621 P.2d 1299, 1304 (1980), or by reference to a fixed standard in the contract such as Force Account provisions, Fiorito Bros. v. Department of Transp., 53 Wash. App. 876, 771 P.2d 1166, 1167 (1989).
    ${ }^{422}$ Architectural Woods, Inc. v. State, 92 Wash. 2d 521, 598 P.2d 1372, 1375 (1979). (Sovereign immunity waived by entering into the construction contract). But a state may expressly preclude liability for prejudgment interest. P.T. \& L. Constr. v. State Dep't of Transp., 108 N.J. 539, 531 A.2d 1330, 1344 (1987).
    ${ }^{423}$ Green Constr. Co. v. Kan. Power \& Light Co., 1 F.3d 1005, 1010 (10th Cir. 1993).
    ${ }^{424}$ Paliotta v. Department of Transp., 750 A.2d 388, 394 (Pa. Commw. 1999); Department of Transp. v. Anjo Constr. Co., 666 A.2d 753, 760 (Pa. Commw. 1995).
    ${ }^{425} 41$ U.S.C. § 611.
    ${ }^{426}$ Youngdale \& Sons Constr. Co. v. United States, 27 Fed. Cl. 516, 562 (1993).
    ${ }^{427}$ For example, see Alaska Statute § 36.90.200.
    ${ }^{428}$ Luria Bros. \& Co. v. United States, 177 Ct. Cl. 646, 369 F.2d 701 (Ct. Cl. 1966).
    ${ }^{429}$ See § 5.C.
    ${ }^{430}$ Harp, supra note 262, at 32.

[^68]:    ${ }^{431}$ Urban Masonary Corp. v. N\&N Contractors, 676 A. 2 d 26, 33 (D.C. App. 1996). Alaska follows the "English Rule," which allows the prevailing party to recover attorneys' fees from the losing party. Ryan v. Sea Air, Inc., 902 F. Supp. 1064, 1070 (D.C. Alaska 1995) (applying Alaska law).
    ${ }^{432}$ Urban Masonary Corp. v. N\&N Contractors, id.
    ${ }^{433}$ Equal Access to Justice Act, 28 U.S.C. § 2412; see Mega Constr. Co. v. United States, 29 Fed. Cl. 396, 479 (1993); See also WASH. Rev. Code § 39.04.240 (allows the prevailing party (either the contractor or the agency) to recover reasonable attorneys' fees in a public works construction contract dispute).
    ${ }^{434}$ Public Utility Dist. No. 1 v. Kottsick, 86 Wash. 2d 388, 545 P.2d 1, 3 (1976) (bad faith or wantonness).
    ${ }^{435}$ Appeal of S \& E Contractors, AEC BCA No. 97-12-72, 742 BCA IT 10, 676 (1974) at 50,695 (fees allowed when they are a necessary expense in carrying out changes to the contract ordered by the Government). But if the fees are not performance related, they are not recoverable. Singer Co. v. United States, 568 F.2d 695, 720-21 (Ct. Cl. 1977).
    ${ }^{436}$ Anchorage v. Frank Coluccio Constr. Co., 826 P.2d 316 (Alaska 1992).
    ${ }^{437}$ Singer Co. v. United States, 568 F.2d 695, 720-21 (Ct. Cl. 1977).
    ${ }^{438}$ Bill Strong Enters. v. Shannon, 49 F.3d 1541, 1549 (Fed. Cir. 1995). This case traces the history of decisions and regulations addressing the allowability of legal and consulting costs related to federal construction contracts.
    ${ }^{439}$ See Anchorage v. Frank Coluccio Constr. Co., 826 P.2d at 330 (applying the rule in Singer that fees incurred in prosecuting a claim that is not associated with contract performance are not recoverable; citing and quoting from a federal Board of Contract Appeals decision); Fiorito v. Goerig, 27 Wash. 2d 615, 179 P.2d 316, 319 (1947) (consultant fees not recoverable in the absence of express contractual or statutory provisions permitting recovery).

[^69]:    ${ }^{440}$ United States v. Callahan Walker Constr. Co., 317 U.S. 56, 61, 63 S. Ct. 113, 87 L. Ed. 49 (1942).
    ${ }^{441}$ Keco Indus., ASBCA 15184, 72-2 BCA ๆI 9576, at 44, 7334 (1972) (5 percent profit allowed).
    ${ }^{442}$ American Pipe \& Steel Corp., ASBCA 7899, 64 BCA $\mathbb{I}$ 4058, at 19,904 (1964).
    ${ }^{443}$ See 48 C.F.R. § 52.242-14(b).
    ${ }^{444}$ See § 6.C.5.d., supra.
    ${ }^{445} \mathrm{~Pa}$. Dep't of Transp. v. James D. Morrison, Inc., 682 A.2d 9, 16 (Pa. Commw. 1996). Subcontractor pass-through claims are discussed in § 6 B.4., supra.
    ${ }^{446}$ This chapter incorporates Trial Strategy and Techniques in Contract Litigation, by K.T. Hoegestedt and Orrin F. Finch, published in Selected Studies in Highway Law (Transportation Research Board 1979).
    ${ }^{371}$ See Subsection 6.A, listing the "Final Remedy" established for state transportation agencies.
    ${ }^{448}$ A similar process is used to initiate arbitration. For example, if the contract specifies arbitration by the American Arbitration Association (AAA), arbitration is initiated by filing a demand for arbitration with the AAA.
    ${ }^{449}$ A party may file an answer in response to a demand for arbitration. See Construction Industry Arbitration Rules and

[^70]:    ${ }^{458}$ DiGioia Bros. Excavating Co. v. Cleveland Dep't of Pub. Util., 135 Ohio App. 3d 436, 734 N.E.2d 438, 453 (1999) (citing Aetna Ins. Co. v. Reed, 33 Ohio St. 283, 395 (1878)).
    ${ }^{459}$ In some jurisdictions, a trial date is not set until the parties certify that the case is ready for trial. If the case has been preassigned, a trial date is usually set before discovery is completed. Usually, the court will set a discovery cut-off date some time in advance of the trial date. All discovery must be completed by that date, and extension of the discovery period requires court approval.
    ${ }^{460}$ See § 6.A.3., Administrative Claims Procedures and Remedies, supra.
    ${ }^{461}$ See generally the discussion of the Florida claims specifications in Subpart 6.A.3.a supra.
    ${ }^{462}$ Metropolitan Dade County v. Recchi Amer., Inc., 734 So. 2d 1123 (Fla. App. 1999) (contractor must follow contract claim procedures prior to commencement of suit). The contract should also preclude the contractor from increasing the amount of the claim or the basis for entitlement after the claim has been filed. See Florida Standard Specification 5-12.3 (contractor claim is limited to amount and basis for entitlement that is

[^71]:    ${ }^{466}$ The Appendix to this Subsection contains a list of affirmative defenses.
    ${ }^{467}$ See FED. R. CIV. P. 13.
    ${ }^{468}$ Mediation is discussed in $\S 7$.
    ${ }^{469}$ Records can be obtained from nonparties voluntarily or by subpoena duces tecum at a records deposition. Federal Rule of Civil Procedure 45 protects nonparties by requiring them to attend a deposition not more than 100 miles from where they reside, are employed, or transact business in person.

[^72]:    ${ }^{470}$ M. Beisman, How To Choose a Construction Expert, 37 Pract. LaW. No. 7, at 19 (1991).
    ${ }^{471}$ The agreement for the consultant's services should not state that the consultant will testify as an expert witness, but only that the consultant may be asked to testify if requested by the defendant. To designate the expert as a witness in the agreement, instead of as a possible witness, raises several problems. First, it exposes the expert to being deposed because the expert is not a consulting expert who cannot be deposed until designated as a testifying expert. Second, it provides ammunition for cross-examination: Why did the unbiased expert agree to testify to his or her opinions before the expert even investigated the claim?

[^73]:    ${ }^{472}$ Each category in the database is represented by an eight digit number that is consecutively numbered. These numbers, which identify all documents in the computer by category, are commonly known as Bates numbers. The numbers can be coded to identify the type of document, the source from which it was obtained, the importance of the document, and whether the document is privileged. For example, all documents in the 10000000 series may be coded as contractor's documents, all documents in the 20000000 series as owner's documents, and all documents in the 30000000 series as designer ( $\mathrm{A} / \mathrm{E}$ ) documents.

[^74]:    ${ }^{473}$ Ford Motor Co. v. Leggat, 904 S.W.2d 643, 647 (Tex. 1995).
    ${ }^{474}$ California: People ex rel. Dep't of Public Works v. Glen Arms Estate, Inc., 230 Cal. App. 2d 841, 854, 41 Cal. Rptr. 303 (1964); New Jersey: Matter of Grand Jury Subpoenas Duces Tecum, 241 N.J. Super. 18, 574 A.2d 449, 454 (1989); New York: Mahoney v. Staffa, 184 A.D.2d 886, 585 N.Y.S.2d 543, 544 (1992); Ohio: State ex. rel. Thomas v. Ohio State Univ., 71 Ohio St. 2d 245, 643 N.E.2d 126, 131 (1994); Washington: Amoss v. University of Wash., 40 Wash. App. 666, 700 P.2d 350, 362 (1985); see also Coastal States Gas Corp. v. Department of Energy, 617 F.2d 854, 863 (D.C. Cir. 1980); Roberts v. City of Palmdale, 5 Cal. 4th 363, 20 Cal. Rptr. 330, 853 P.2d 496 (1993) (privilege extended by statute to public entity).
    ${ }^{475}$ Matter of Grand Jury Subpoenas, id. at 455.
    ${ }^{476}$ See L.A. Barsdate, Attorney-Client Privilege for the Government Entity, 97 Yale L. J. 1725 (1988); Note, The Applicability and Scope of the Attorney-Client Privilege in the Executive Branch of the Federal Government, 63 B.U.L. REV. 1003 (1982).
    ${ }^{477}$ Hickman v. Taylor, 329 U.S. 495 (1947); FED. R. CIV. P. 26(b).
    ${ }^{478}$ Upjohn Co. v. United States, 449 U.S. 383 (1981); Strong, McCormick on Evidence, 87-1, at 320 (4th ed. 1992).
    ${ }^{479}$ L.M. Cohen, Expert Witness Discovery Versus the Work Product Doctrine: Choosing a Winner in Government Contracts Litigation, 27 PuB. Cont. L.J. 719 (1998); see also State ex rel. State Bd. of Pharmacy v. Otto, 866 S.W.2d 480 (Mo. App. W.D. 1993).
    ${ }^{480}$ Crenna v. Ford Motor Co., 12 Wash. App. 824, 532 P.2d 290 (1975) (non-testifying expert's opinion not discoverable based on superior court rule that mirrors FED. R. CIV. P. 26(b)(4)(A)); Morrow v. Stivers, 836 S.W.2d 424 (Ky. App. 1992).

[^75]:    ${ }^{483} 5$ U.S.C. § 552; see also O.F. Finch \& G. A. Green, Freedom of Information Acts, Federal Data Collections and Disclosure Statutes Applicable to Highway Projects and the Discovery Process (National Cooperative Highway Research Program, Legal Research Digest No. 33, 1995).

[^76]:    ${ }^{484}$ See supra note 472 describing the Bates numbering system.
    ${ }^{485}$ If a manual system is used, issue books can be prepared that contain all documents that pertain to each issue or to a particular witness. Documents pertaining to more than one issue or witness can be cross-referenced in the issue book.
    ${ }^{486}$ The information is objective because it can be gleaned from the document by the coder without interpretation or analysis.

[^77]:    ${ }^{487}$ See supra note 472.

[^78]:    ${ }^{488} 8$ WIGMORE, Evidence § 2322 (rev. ed. 1961).

[^79]:    ${ }^{490}$ FED. R. Civ. P. 34.
    ${ }^{491}$ FED. R. CIV. P. 45(a).
    ${ }^{492}$ FED. R. Evid. 1007.

[^80]:    ${ }^{493}$ Feldgiose v. A.L. Star Constr. Co., 2006 Conn. Super. LEXIS 2852 (Conn. Superior Ct., Ansonia-Milford Jud. Dist., 2006).
    ${ }^{494}$ Vanounou v. Cantu, 2007 Tex. App. LEXIS 7168 (Texas Ct. App., 13th Dist., Corpus Christi-Edinburg, 2007).
    ${ }^{495}$ Beck v. Sapet, 937 So. 2d 945; 2006 Miss. LEXIS 484 (Sup. Ct. of Mississippi, 2006).

[^81]:    ${ }^{496}$ Ballard Residential, LLC v. Pac. Rim Framing Co., 2009 Wash. App. LEXIS 948 (Wash. Ct. App. 2009); subsequent history 2009 Wash. App. LEXIS 1103 (Wash. Ct. App. 2009).
    ${ }^{497}$ Farley v. Duke Constr., 2008 Ohio 6419; 2008 Ohio App. LEXIS 5363 (Ohio Ct. App., 10th App. Dist., Franklin Co., 2008).
    ${ }^{498}$ Robertet Flavors, Inc. v. Tri-Form Const., Inc., 203 N.J. 252; 1 A.3d 658; 2010 N.J. LEXIS 747 (Sup. Ct. of N.J., 2010).

[^82]:    ${ }^{499}$ Crossley Constr. Corp. v. NCI Bldg. Sys., L.P., 123 Fed. Appx. 687; 2005 U.S. App. LEXIS 2702 (6th Cir. 2005).
    ${ }^{500}$ Metzler Contr. Co. LLC v. Stephens, 642 F. Supp. 2d 1192; 2009 U.S. Dist. LEXIS 61198 (D. Haw. 2009).

[^83]:    ${ }^{501}$ C. H. Guernsey \& Co. v. United States, 65 Fed. Cl. 582; 2005 U.S. Claims LEXIS 125 (U.S. Ct. Fed. Clms. 2005).

[^84]:    ${ }^{502}$ The Sedona Conference describes itsef as an organization that
    exists to allow leading jurists, lawyers, experts, academics and others, at the cutting edge of issues in the area of antitrust law, complex litigation, and intellectual property rights, to come together-in conferences and mini-think tanks (Working Groups)-and engage in true dialogue, not debate, all in an effort to move the law forward in a reasoned and just way.
    One of its working groups describes its mission as "to develop principles and best practice recommendations for electronic document retention and production in civil litigation." For additional information, see the organization's Web site at http://www.thesedonaconference.org/, last accessed on Jan. 4, 2012.
    ${ }^{503}$ Armory v. Delamirie (Smith's L. Cas.) 1 Strange 505, 93 Eng. Rep. 664 (K.B. 1722); cited in numerous federal appellate cases, see, e.g., Bigelow v. RKO Radio Pictures, Inc., 327 U.S. 251, 66 S. Ct. 574,90 L. Ed. 652 (1946), McKee v. Gratz, 260

[^85]:    ${ }^{504}$ FRCP Rule 34, Producing Documents, Electronically Stored Information, and Tangible Things, or Entering onto Land, for Inspection and Other Purposes.
    ${ }^{505}$ FRCP Rule 34(a)(1)(A).
    ${ }^{506}$ FRCP Rule 34(b)(1)(C).
    ${ }^{507}$ FRCP Rule $34(\mathrm{~b})(2)(\mathrm{A})$; and see FRCP Rule 29 regarding stipulations.
    ${ }^{508}$ FRCP Rule 34(b)(2)(B).
    ${ }^{509}$ FRCP Rule 34(b)(2)(C).
    ${ }^{510}$ FRCP Rule 34(b)(2)(D).
    ${ }^{511}$ FRCP Rule 34(b)(2)(E).
    ${ }^{512}$ FRCP Rule 34(b)(2)(E)(i).

[^86]:    ${ }^{513}$ FRCP Rule 34(b)(2)(E)(ii).
    ${ }^{514}$ FRCP Rule 34(b)(2)(E)(iii).
    ${ }^{515}$ FRCP Rule 34(c).

[^87]:    ${ }^{516}$ FRCP Rule 26(f)(1).
    ${ }^{517}$ FRCP Rule 26(f)(2).

[^88]:    ${ }^{518}$ FRCP Rule 26(f)(3).
    ${ }^{519}$ FRCP Rule 26(f)(3)(C).
    ${ }^{520}$ FRCP Rule 26(a)(1); see Rule 26(a)(1)(A)(ii) in particular with regard to electronically stored information.
    ${ }^{521}$ FRCP Rule 26(a)(4).
    ${ }^{522}$ FRCP Rule 26(a)(3)(B).
    ${ }^{523}$ FRCP Rule 26(e)(1).
    ${ }^{524}$ FRCP Rule 26(g).

[^89]:    ${ }^{525}$ FRCP Rule 26(b)(1).
    ${ }^{526}$ FRCP Rule 26(b)(2)(C).
    ${ }^{527}$ FRCP Rule 26(b)(2)(B).
    ${ }^{528}$ FRCP Rule 26(b)(5)(A).
    ${ }^{529}$ FRCP Rule 26(b)(5)(B).

[^90]:    ${ }^{530}$ FRCP Rule 26(c)(1).
    ${ }^{531}$ FRCP Rule 26(c)(3), making FRCP Rule 37(a)(5) applicable to the award of such expenses.
    ${ }^{532}$ FRCP Rule 37, Failure to Make Disclosures or to Cooperate in Discovery; Sanctions.

[^91]:    ${ }^{533}$ FRCP Rule 37(c)(1).
    ${ }^{534}$ FRCP Rule 37(a).

[^92]:    ${ }^{535}$ FRCP Rule 37(b)(2).
    ${ }^{536}$ FRCP Rule 37(b)(2)(C), (c)(1)(A), and (d)(3).
    ${ }^{537}$ Pension Comm. of the Univ. of Montreal Pension Plan v. Banc of Am. Sec. LLC et al., 2009 U.S. Dist. LEXIS 82301 (S.D.N.Y. 2009), subsequent proceedings 685 F. Supp. 456 (S.D.N.Y. 2010), amended by 2010 U.S. Dist. LEXIS 4546 (S.D.N.Y. 2010), partial summary judgment denied, 750 F . Supp. 2d 450 (S.D.N.Y. 2010), motions re expert testimony, 691 F. Supp. 2d 448 (S.D.N.Y. 2010); prior proceedings in same case, 592 F. Supp 2d 606 (S.D.N.Y. 2009), on motions for reconsideration, 617 F. Supp. 2d 216 (S.D.N.Y. 2009), vacated and remanded, 568 F.3d 374 (2d Cir. 2009), summary judgment denied, 652 F. Supp. 2d 495 (S.D.N.Y. 2009).
    ${ }^{538}$ Aiken v. Rimkus Consulting Group, Inc., 2007 U.S. Dist. LEXIS 2327 (S.D. Miss. 2007), 2007 U.S. Dist. LEXIS 96185 (S.D. Miss. 2007), 2007 U.S. Dist. LEXIS 85489 (S.D. Miss. 2007), 333 Fed. Appx. 806; 2009 U.S. App. LEXIS 11243 (5th Cir. 2009).

[^93]:    ${ }^{539}$ Robert Owen, Reset to Neutral: Rethinking EDD Preservation Protocol, Law Technology News, Dec. 1, 2011.
    ${ }_{540}$ Pippins et al. v. KPMG, No. 1:11-CV-0037, 2011 U.S. LEXIS 116427 (2011), cited in Mark Michels, More on Pippins Decision-Preservation Proportionality, Electronic Datas Discovery Update, Nov. 14, 2011; available at
    http://www.eddupdate.com/2011/11/more-on-judge-cotts-pippins-decisionpreservation-proportionality.html.
    ${ }^{541}$ Mark Michels, More on Pippins Decision—Preservation Proportionality, Electronic Datas Discovery Update, Nov. 14, 2011.
    ${ }^{542}$ See, e.g., the Default Standard for Discovery, Including Discovery of Electronically Stored Information (ESI), issued by the U.S. District Court for the District of Delaware on Dec. 8, 2011; and see discussion in Mark Michels, Delaware's Default E-Discovery Developments, Law Technology News, Dec. 20, 2011.

[^94]:    ${ }^{543}$ R.M. Gelb, Standard Paragraphs in Interrogatories, 28 Prac. LAW. No. 4, at 51 (1982). This article contains suggestions on how to draft interrogatories, regardless of the subject matter of the litigation. It also offers examples of introductory language and definitional sections that can be used in drafting interrogatories.
    ${ }^{544}$ FED. R. CIV. P. 26(b)(1).
    ${ }^{545}$ FED. R. CIV. P. 33 advisory committee note.
    ${ }^{546}$ McCormick-Morgan, Inc. v. Teledyne Indus., 134 F.R.D. 275, 286, rev'd in part on other grounds, 765 F. Supp. 611 (N.D. Cal. 1991).
    ${ }^{547}$ Id.
    ${ }^{548}$ FED. R. CIV. P. 33(b) advisory committee note; McCaugherty v. Sifferman, 132 F.R.D. 234, 249 (N.D. Cal. 1990).

[^95]:    ${ }^{549}$ FED. R. Civ. P. 33(c); see also Fed. R. Civ. P. 26(b)(4)(A).
    ${ }^{550}$ FED. R. CIV. P. 33(a) (limiting number of interrogatories to 25); Clark v. Burlington Northern R.R., 112 F.R.D. 117, 119 (N.D. Miss. 1986) (rule is designed to eliminate the previously common practice of serving sets of interrogatories consisting of hundreds of unrelated and mostly irrelevant boiler plate or form interrogatories).
    ${ }^{551}$ Some local rules specify that "subparts" are to be counted. See, e.g., Armstrong v. Snyder, 103 F.R.D. 96, 103 (E.D. Wis. 1984). But see Clark, id. at 118 (court considered subparts to be so integrally related as to make up single question); Myers v. U.S. Paint Co., 116 F.R.D. 165 (D. Mass. 1987) (court declined to mechanically count each subparagraph as a separate interrogatory). Whether the subparts count as individual interrogatories will generally depend on whether the subparts bear any relationship to the primary question or to each other. Myers, 116 F.R.D. at 165. Also, local rules may provide for counsel to stipulate to a greater number of allowable interrogatories. Armstrong, 103 F.R.D., at 104 (citing E.D. Wis. L.R. 7.03).
    ${ }^{552}$ FED. R. CIV. P. 33(b)(4).

[^96]:    ${ }^{553}$ Interrogatories may be used as evidence at trial. FED. R. CIV. P. 33(c). They can be read to the jury or read by the judge in a bench trial.
    ${ }^{554}$ P.R. Aqueduct \& Sewer Auth. v. Clow Corp., 108 F.R.D. 304, 307 (D.P.R. 1985) (citing former FED. R. CIV. P. 33(c)); see also Daiflon, Inc. v. Allied Chemical Corp., 534 F.2d 221 (10th Cir. 1976).
    ${ }^{555}$ FED. R. Civ. P. 34.
    ${ }^{556}$ FED. R. CIV. P. 45(a).

[^97]:    ${ }^{557}$ Disseminating the document to someone outside the scope of the privilege may waive the privilege. Ulibarri v. Superior Court, 184 Ariz. 382, 909 P.2d 449, 452 (1995).
    ${ }^{558}$ FED. R. CIv. P. 36.
    ${ }^{559}$ Id. A party may recover its costs in proving a fact or contention that was denied. FED. R. CIV. P. 37(c)(2).
    ${ }^{560}$ For example, a request for admission could be used to establish as a fact that the contractor failed to provide written notice of its intention to file a claim before proceeding with what it claims was extra work. That failure can then be the basis for dismissal of the claim. A.H.A. Gen. Constr., Inc. v. N.Y. City Housing Auth., 92 N.Y.2d 20, 677 N.Y.S.2d 9, 699 N.E.2d 368 (1998); Absher Constr. Co. v. Kent Sch. Dist., 77 Wash. App. 137, 890 P.2d 1071 (1995) (summary judgment granted dismissing claim).
    ${ }^{561}$ Kiewit-Grice v. Wash. State Dep't of Transp., Thurston County Superior Court No. 89-2-02756-6 (1989) (partial summary judgment granted limiting damages claimed in the lawsuit to the amount reserved in the final contract estimate, even after contractor denied in its response to a request for admission that its claim was so limited).
    ${ }^{562}$ FED. R. Evid. 1007.
    ${ }^{563}$ FED. R. CIV. P. 36(a).
    ${ }^{564}$ Id. At one time, a common practice was to combine requests for admission with interrogatories. The interrogatory following each request asked why the request was denied. Some jurisdictions prohibit combining requests for admission

[^98]:    ${ }^{569}$ Numbering of deposition exhibits should be consecutive throughout all depositions by all parties. Counsel should stipulate to this procedure at the first deposition. For example, the exhibits used in the deposition of Ms. X taken by the contractor should be marked No. 1 through No. 20. The exhibits taken in the next deposition taken by the owner would be marked beginning as No. 21 through 40. The first exhibit in the third deposition would be marked No. 41 and so on. Consider using one court reporter or court reporter service for all depositions. This allows the court reporter to have a master deposition list that can be brought to every deposition allowing the witness to be shown a document marked as an exhibit in an earlier deposition. By agreeing on one reporter for all depositions, the parties can obtain competitive bids from court reporters and save money.

[^99]:    ${ }^{570}$ See generally D.R. Suplee \& D.S. DONALDSON, THE DEposition Handbook (3d ed. 1999).
    ${ }^{571}$ This may raise questions about work product and protection of an attorney's mental impressions and theories. See Karn v. Ingersoll Rand, 168 F.R.D. 633 (N.D. Ind. 1996) (generally, whatever the expert has considered in formulating the opinion is discoverable); see also L.M. Cohen, Expert Witness Discovery Versus the Work Product Doctrine: Choosing a Win-

[^100]:    ner in Government Contracts Litigation, 27 Pub. Cont. L.J. 719 (1998); L. Mickus, Discovery of Work Product Disclosed to a Testifying Expert Under the 1993 Amendments to the Federal Rules of Civil Procedure, 27 Creighton L. Rev. 773 (1994); Comment, Discoverability of Attorney Work Product Reviewed by Expert Witnesses: Have the 1993 Revisions to the Federal Rules of Civil Procedure Changed Anything? 69 Temp. L. Rev. 451 (1996).
    ${ }^{572}$ An exception is where the deposition can be used by the opponent because the witness is not available for trial, and the court allows the deposition to be read to the jury or read by the judge in a bench trial.
    ${ }^{573}$ See FED. R. CIv. P. 37(a).

[^101]:    ${ }^{574}$ A good expert's logic in formulating opinions is often unassailable, assuming that the premises are correct. Where the expert may be vulnerable is in the assumptions that the expert makes, or the facts upon which the expert relies.
    ${ }^{575}$ Material used in preparation for a deposition may be discoverable. Al-Rowaishan Establishment Universal Trading \& Agencies, Ltd. v. Beatrice Foods Co., 92 F.R.D. 779, 780 (S.D. N.Y. 1982); FED. R. EvID. 612 (writings used to refresh recollection while testifying or before testifying discoverable).

[^102]:    ${ }^{577}$ FED. R. CIV. P. 11 and 37.
    ${ }^{578}$ Wash. State Physicians Insurance Exchange \& Ass'n v. Fisons Corp., 122 Wash. 2d 299, 858 P.2d 1054, 1080 (1993); see also Dondi Prop. Corp. v. Commerce Savings and Loan Ass'n, 121 F.R.D. 284 (N.D. Tex. 1988); Comment, Sanctions

[^103]:    ${ }^{580}$ Lawyers engaged in construction contract claims litigation consider it amusing that one state DOT's formal publication establishing standards for maintaining records on construction contracts is entitled the Manual of Uniform RecordKeeping, and that its acronym is "MURK," a moniker they consider completely appropriate given the issues in most claims cases.

[^104]:    ${ }^{581}$ For example, the New York Court of Appeals has articulated the public policy considerations that underlie notice requirements in public works contracts. A.H.A. General Constr., Inc. v. N.Y. City Housing Auth., 92 N.Y.2d 20, 677 N.Y.S.2d 9, 699 N.E.2d 368, 376 (1998) (timely notice of claim or extra work allows a public agency to make necessary adjustments in the work, mitigate damages, document costs, and maintain the integrity of the public bidding process).
    ${ }^{582}$ Green Constr. Co. v. Kan. Power \& Light Co., 1 F.3d 1005, 1011 (10th Cir. 1993) (motion to strike the jury, on the

[^105]:    ${ }^{592}$ Traditionally, the order of proof is determined by how the defendants are named in the caption of the complaint filed by the plaintiff. They are named in that order simply because the plaintiff chose to list them that way. The issue may arise, for example, in a case where the agency is named as a codefendant with its consulting engineer. Arguably, it may be more logical for the party who prepared the plans to present its defense first when the adequacy of those plans is in dispute. See Green Constr. Co. v. Kansas Power \& Light Co., 1 F.3d 1005 (10th Cir. Kan. 1993); see also FED. R. Evid. 611(a).
    ${ }^{593}$ See supra note 590.
    ${ }^{594}$ FED. R. Evid. 403.

[^106]:    ${ }^{595}$ Some local court rules require all parties to file trial briefs.
    ${ }^{596}$ For example, string-citing cases from other jurisdictions is usually not helpful, unless the issue before the court is one of first impression. Some judges are impressed by policy arguments and how the position urged by counsel comports with that policy.
    ${ }^{597}$ State or local court rules may require a working copy of the brief to be provided to the judge before trial, and it should be provided even in the absence of a requirement.
    ${ }^{598}$ See generally F.T. Vom Baur, The Art of Brief Writing, 22 Prac. LaW. No. 1, at 81 (1976).

[^107]:    ${ }^{599}$ Charts can be reduced to notebook size, annotated, and included in the trial notebook for use in cross-examination. For example, if the contractor has claimed that it was unable to

[^108]:    ${ }^{602}$ If the model maker testifies, he or she will probably be asked how much the model cost. The cost can run into thousands of dollars.
    ${ }^{603}$ See generally 3 Am. JUR. 2D Trials at 377 (1965).
    ${ }^{604}$ The use of Microsoft PowerPoint® is another option for presenting documentary evidence.
    ${ }^{605}$ Billboard advertising and roadside signs are an example. Television commercials are another. They are designed to convey a message.

[^109]:    ${ }^{606}$ Armed Service Procurement Regulation Manual (ASPM No. 21, Feb. 24, 1969).
    ${ }^{607}$ Contract Construction Litigation Course Manual 88 (Federal Publications).
    ${ }^{608}$ See D. Schwartz, Going to Trial in The United States Claims Court, 32 Prac. LAW. No. 1, at 35 (1986). Although the article discusses trying cases in the United States Claims Court, it offers suggestions that the reader may find useful in any bench trial regardless of the forum.
    ${ }^{609}$ An exception may be a bench trial where the trial judge is familiar with the case from pretrial proceedings or where counsel can gain a clear tactical advantage by deferring the opening statement. See also Schwartz, id.
    ${ }^{610}$ M. Mitchell, A Method for Evolving a Trial Strategy, 27 Prac. Law. No. 4, at 82 (1981). The article offers suggestions for developing a theme.

[^110]:    ${ }^{611}$ Consider personalizing the case by having the project engineer sit with you at counsel table throughout the trial.
    ${ }^{612}$ See possible exceptions to this view noted supra note 609.

[^111]:    ${ }^{613}$ Witnesses should be asked if the use of a picture or model, or some other visual aid, will assist them in explaining their testimony. This makes it difficult for opposing counsel to object to its use.
    ${ }^{614}$ See J. Weinstein, Examination of Witnesses, 23 Prac. Law. No. 2, at 39 (1977).
    ${ }^{615}$ See generally L. Packel and D. Spina, A Systematic Approach to Pretrial Preparation, 30 Prac. Law. No. 3, at 23, 33 (1984).
    ${ }^{616} \mathrm{~A}$ witness who volunteers information may appear to be biased.
    ${ }^{617}$ Expert witnesses on liability and damages ordinarily should be called last because they can summarize the case and handle any loose ends.

[^112]:    ${ }^{618}$ The contractor may be charged with knowledge of what the borings show even if the contractor did not examine them. See § 5.B, Differing Site Conditions, supra.
    ${ }^{619}$ FED. R. EvID. 611(c).
    ${ }^{620}$ A.S. Cutler, Successful Trial Tactics 123-30 (4th ed. 1950), "Some Don'ts in Cross Examination." Irving Younger referred to them as the "Ten Commandments of CrossExamination" in his evidence seminars (reprinted at www.nebarfnd.org/10commandments.pdf, Nebraska State Bar Foundation Web site).

[^113]:    ${ }^{621}$ See, e.g., CUTLER, id.
    ${ }^{622}$ A number of inconsistencies, even though minor, may help convince the trier of fact that the witness is mistaken or lying.
    ${ }^{623}$ Usually, an expert's opinion is a logical extension of the premises upon which the opinion is based. Where the expert may be vulnerable is in the premises used to form that opinion, particularly if a premise is an assumption that is not supported by the evidence.

[^114]:    ${ }^{624}$ The trial notebook is usually a three-ring notebook that allows issues and facts to be organized alphabetically or chronologically. See Packel and Spina, supra note 615.
    ${ }^{625}$ FED. R. Evid. 611(a).
    ${ }^{626}$ Id. Under this rule, the court has the power to "exercise reasonable control over the mode and order of interrogating witnesses and presenting evidence so as to (1) make the interrogation and presentation effective for the ascertainment of the truth, (2) avoid needless consumption of time...."

[^115]:    ${ }^{627}$ It is proper to draw reasonable inferences from the evidence. But counsel should avoid overstating what the evidence actually proves.
    ${ }^{628}$ A common practice is to enlarge the document on a poster board that is light and easy to handle.

[^116]:    ${ }^{629}$ Ordinarily, exhibits admitted for illustrative purposes are not substantive evidence and do not go to the jury room. See Arnold v. Riddell, Inc., 882 F. Supp. 979, 995 (D. Kan. 1995).

[^117]:    ${ }^{630}$ Jurgens Real Estate Co. v. R.E.D. Constr. Corp., 103 Ohio App. 3d 292, 659 N.E.2d 353, 356-57 (1995).
    ${ }^{631}$ FED. R. EvID. 701.
    ${ }^{632}$ FED. R. EvID. 408; but see Scott Co. of Calif. v. MKFerguson, 832 P.2d 1000 (Colo. App. 1991) (employee's analysis of claim's worth entitled "Settlement Detail" was not an offer of settlement within scope of Rule 408 but was a report prepared in ordinary course of business, and was admissible).
    ${ }^{633}$ See "Pre-Trial Motions," sub.D.6.c, supra.
    ${ }^{634}$ FED. R. Evid. 1006.
    ${ }^{635}$ C.L. Maddox, Inc. v. The Benham Group, Inc., 88 F.3d 592, 601 (8th Cir. 1996) (admission of summaries of business records was within trial court's discretion; all underlying information was available to opposing party as required by rule).
    ${ }^{636}$ See generally 5 AM. JUR. Trials § 888-906 (1965).
    ${ }^{637}$ FED. R. Evid. 612.

[^118]:    ${ }^{638}$ Affirmative defenses reproduced from Trial Strategy and Techniques in Highway Contract Litigation, NCHRP Research Results Digest No. 108, by Orwin F. Finch and Kingsley T. Hoegstedt (1979).

