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The following document has been provided in cooperation with Patrick J. Tomaselli, esq.

**DOCUMENTATION AND PROOF  
OF THE  
CONTRACTOR'S CONSTRUCTION CLAIM**

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**I THE IMPORTANCE OF DOCUMENTATION**

- A. Project control and cost accounting purposes: to fulfill normal business needs.
- B. To maintain and establish an ongoing, accurate and comprehensive record of job conditions and problems and their impact upon the project, which records may later be used to assist in:
  - 1. Dispute avoidance
  - 2. Dispute settlement
  - 3. Proof of liability and damages in litigation, arbitration or administrative proceedings
- C. No matter how clear the liability may appear to the contractor and no matter how much the contractor may claim to have suffered by virtue of the wrongful acts of the Owner, design professional or other third party, the contractor will usually be unable to obtain an acceptable negotiated settlement or recovery unless it can provide authentic, detailed and convincing documentary proof of:
  - 1. The adversary's acts or omissions which detrimentally impacted the contractor's work;
  - 2. How, when and to what extent the contractor's performance was affected; and
  - 3. The resultant cost to the contractor attributable to the other party's culpable conduct.

## II. THE CONTRACT DOCUMENTS

### A. The contract documents include:

1. Contracts between the contractor and owner and between contractor and subcontractor
2. The plans and specifications, including an index of any revisions to the contract drawings
3. The general and special conditions
4. Technical specifications
5. Addenda

Note: Any superseded portions of the specifications should be cut or crossed out and the superseding addenda affixed in their stead as a matter of course, along with the addenda date. This will help avoid the embarrassing specter of misplaced reliance upon inapplicable provisions of the specifications during subsequent claims negotiation, arbitration or litigation.

### 6. The bid documents

Consists of information provided by the owner, including engineering data, soils analysis information, boring and blasting logs, precedence diagrams, milestone dates, scheduling CPMs, etc.

7. Any bulletins, letters of clarification, etc.
8. Anything which the owner or the owner's representative incorporates in the contract by specific reference.

Caveat: For any codes or standards which are incorporated by reference, make sure that the proper (usually the latest) edition of any such referenced document is consulted.

### B. The importance of familiarity with the contract documents

1. An intimate knowledge of the contract and its requirements is necessary for both the home office personnel and the field supervisor and/or foreman in order that either or both might immediately recognize material or labor "requirements" which go beyond the contract obligations, thereby justifying a claim for additional compensation.
2. The home office should thoroughly investigate and evaluate all claim data and "red flags" from the field and should from the outset maintain a separate claim file for each issue of potential dispute which can readily be recalled and reviewed at a later date by the contractor's attorney and/or any other consultants.
3. The prompt recognition of deviations from the contract is necessary to avoid any possibility of "losing" a claim through
  - a. Failure to timely comply with applicable notice provisions; or

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- b. Failure to preserve necessary supportive evidence; or
    - c. Acting in a way which permits the owner to allege and the ultimate finder of facts to determine that the contractor has performed what would otherwise be extra work on a "volunteer" and therefore non-compensable basis.
  4. Knowing which parties or individuals have the authority to issue directives and orders for field changes and the correct procedures for making such communications and modifications will prevent the contractor from putting itself in a position where it has performed technically unauthorized work for which no compensation will be paid and for which the contractor may have to bear the expense of removal and repair.
  5. Familiarity with the contract requirements will help ensure that necessary notice to the owner or architect will not be overlooked and a claim lost through failure to timely file.
  6. Knowledge of what constitutes compensable and non-compensable delays and of contractual exculpatory clauses will help ensure that a claim is presented or prosecuted on a proper and recoverable theory of liability.
  7. Suggestion: As a matter of preparation, it is wise for the contractor to prepare a claims checklist noting the applicable provisions relating to claims and notice requirements under the contract documents of the particular job. Such a checklist (which can be prepared by contractor's own staff or its attorney) should be used and referred to frequently from the beginning of the job.
- C. When in doubt, get it in writing
1. Whenever the contractor is uncertain as to whether or not a change has been properly authorized, he should immediately submit written confirmation to the owner, together with an indication, if applicable, that such change constitutes additional work and that performance by the contractor will result in the filing of a claim for relief.
    - a. Owner's responding alternatives
      - (i) The owner can override the change directive, thereby saving the contractor from performing such unauthorized work.
      - (ii) The owner can ratify the communicated directive and confirm that additional compensation will be paid to the contractor, thereby resolving any questions as to the contractor's entitlement for additional compensation.
      - (iii) The owner can ratify the directive but indicate that the work called for is part of the original contract, thereby entitling the contractor to no additional compensation, in which case the contractor should file a further written protest before proceeding with the work.
      - (iv) The owner may not respond at all, in which case the court or arbitration panel will probably later find a tacit approval of the change and of the contractor's demand for additional compensation.

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2. Similarly, written confirmation of all oral instructions, directions, and changes should be requested from the A/E or other design professional.

**III. MAINTAINING PROPER RECORDS**

A. The primary importance of establishing a documentation system is to ensure maintenance of a contemporaneous, accurate, complete, chronological, convincing and provable record of job conditions and problems and their impact upon the project and the time, schedule, and cost of the contractor's performance. The success of a contract claim almost always depends upon proper and full documentation and the contractor's files are the usual primary source.

B. Typical records from the contractor's files include

1. The Foreman's or Superintendent's Daily Report [See sample "Daily Job Journal", Appendix II] which usually includes the following information:

- a. Daily record of work progress
- b. Descriptions and summary of site conditions
- c. Weather conditions
- d. Delays in the receipt of materials or equipment necessary to the contractor's work.
- e. Hold-ups due to activities, delays or interferences by the owner or other trades
- f. Requests for clarifications, directions, etc., from the owner and/or design professional
- g. Responses or lack of responses received from the design professional or owner
- h. Description of the work actually performed by the contractor's own forces and his subcontractors, if any
- i. Any other information which the project foreman deems important.

Note: For purposes of encouraging accurate information recordation by the usually busy and hassled project foreman, it may be desirable to have each such foreman carry a portable dictation device which he can then use to transcribe his report at home or in the job trailer at the end of the work day.

2. Conversation Memos/Telephone Logs

- a. It is often important to reconstruct conversations and developments and to identify persons and parties involved in transactions, especially when and if these matters become important years later in litigation or arbitration. Such facts of life as fading memory or employee turnover make such regularly kept memoranda doubly important because of such evidentiary rules as "present recollection refreshed", "past recollection recorded", and the "business record" exception to the hearsay rule.
- b. An important adjunct to and corroboration of such memoranda and/or logs are contemporaneous letters from the persons involved summarizing and

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verifying the details of particularly important conversations and meetings. The added value of such confirming correspondence is that it may establish either express or implied acquiescence in the contractor's story by the other side.

3. Job Meeting Minutes (regular and special)
  - a. Usually compiled and provided by the architect or construction manager
  - b. Any comments, objections, or corrections should be made immediately and in writing, preferably by the contractor's representative who was actually present at such meeting
  - c. If transcribed minutes or summaries are not provided, the contractor should confirm his understanding of the content of the meeting in the form of a letter.
  
4. Photographs (and in appropriate cases, movies or video tapes)
  - a. Use of instant developing type photographs is suggested
  - b. Photographs provide an ongoing pictorial diary of job progress
  - c. Always identify on the back of the photograph the photographer, the time, date, location, conditions depicted, the persons present, directions, scale, etc.
  - d. Where a large section of the contractor's work is involved, or where the fit of that work with surrounding work by other trades is in issue, or where matters of terrain or surrounding conditions are important, the contractor may wish to consider taking a series of photos which can be overlapped to provide a panoramic vista of a scene. Alternatively, movies or videotapes may be employed in such circumstances.
  - e. Photographs, movies, etc., can be extremely important in allowing judges, jurors, or arbitrators who might be unfamiliar with particular construction methods and terminology to understand and appreciate the actual physical factors being considered.
  - f. Photographs can also preserve for later observation and evaluation conditions and work which may later be buried or covered up by the work of other trades.
  
5. Cost Accounting Records

Include any time sheets, payroll records, payroll certifications, delivery tickets, payment vouchers, invoices, ledgers, computer printouts, etc.

  - a. It is important to realize that proving *liability* is only half the battle: the contractor must also prove *damages* - both "proximate cause" and amount - with reasonable certainty.
  - b. Detailed and segregated cost records are particularly important with respect to delay, acceleration, and impact claims, since traditional

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accounting records make it difficult to break out inefficiency and loss of productivity factors.

- c. The ideal system allows for contemporaneous segregation of unanticipated costs by charging all such costs to separate "force accounts" or "extra work accounts". The many advantages of such a system include the following:
  - (i) It is far easier to keep and maintain contemporaneous records of costs than to segregate such expenses from ordinary contract costs when a claim subsequently develops months or years after the facts.
  - (ii) While maintenance of such separate accounts may seem slightly burdensome at the time, they will in truth prove to be easier and less expensive to maintain than after-the-fact reconstruction.
  - (iii) Contemporaneous records are, by their very nature, more convincing to a judge or arbitrator of the contractor's claims than would be any ex post facto reconstruction.
  - (iv) By establishing at the outset accounting techniques that segregate and separately maintain "breach-generated" costs, proof of damages at trial can be as simple as introducing evidence of such separate accounts.
- d. May be used in connection with bar charts, CPM, PERT, GANTT networks, etc., to illustrate not only delays and disruptions and their impact upon the project in terms of time and scheduling but also, and just as importantly, the impact upon the project and the contractor in terms of job cost.

### 6. Contract Notices, Correspondence, etc. (including notices to proceed, stop and start work orders, certificates of substantial and actual completion, punch lists, etc.)

- a. All notices should be appropriately drafted and timely and properly communicated
- b. Retain a copy of any notice actually sent.
- c. Preserve all correspondence and memoranda, helpful or harmful, formal or "scraps", typed or scribbled, etc.
- d. Retain originals of all incoming correspondence and memoranda and first "clean" copies of outgoing correspondence in a "master file." Work copies, with or without annotations, should be in separate "disputes" or "issues" files.
- e. Termination or Default Notices should also be kept and the dates and manner of receipt thereof clearly recorded.

Note: Upon termination of you or any of your subcontractors by the owner, it may be advisable to consider ordering a survey of work in place to protect against you and/or your surety being hit with an inflated cost to complete claim as a result of a "sweetheart" contract given to a completing contractor or subcontractor.

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7. Contract Modifications
  - a. Should if at all possible, be in agreement form executed by all involved parties with the same formality as the original contract documents.
  - b. If the foregoing is not possible or practical, it should at least be seen that some written memorialization exists, e.g., an executed change order, letters signed by the parties approving or authorizing the modification, etc.
8. Progress Schedules and Reports, Revised Schedules, CPM, PERT, Gantt, Bar Charts, etc.
  - a. All schedules should be preserved, along with a clear record of the dates and circumstances of any revisions.
  - b. Written notifications should be given immediately to the owner and/or design professional as to the impact or potential impact upon the contractor's performance resulting from any such change, including interference, delays, forced out-of-sequence work, necessity for time extensions, subsequent acceleration and/or "loading" of labor, etc.
  - c. If a CPM or similar network technique is to be used either by contractual mandate or by the contractor's election to prove delays, the contractor should, if necessary, obtain an expert consultant to develop the updated CPM. This may be done either directly or through the contractor's attorney.
9. Expert Reports
  - a. Experts should be consulted at an early date when their advice can be most useful and their observations and tests most critical and convincing.
  - b. As a matter of tactics, it may be best to have experts retained indirectly by your attorney in order to provide additional protection of any such expert reports from early discovery by the other side should the matter result in litigation. In this regard, reference is made to CPLR Section 3101(b) concerning "privileged matter"; CPLR Section 3101(c) concerning "attorney's work product"; and CPLR Section 3101(d) concerning "material prepared for litigation." Caveat: Since CPLR Section 3101(d) only provides qualified immunity from discovery of your expert's reports by the other side, it is often a tactical judgment whether or not to order a written report, a decision best made by or in consultation with your legal counsel.
  - c. It is important to note that retainer of an expert, while expensive, may be money well spent, since the mere existence of an expert report and the knowledge by the other side that you have such "ammunition" can often provide significant enough leverage to prompt an acceptable settlement.
10. Change Orders (with backup computations, correspondence, etc.)
  - a. The file should contain not only copies of executed change orders but also the contractor's backup calculations indicating how the change order was priced.

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- b. Also to be included is correspondence among the parties which may reflect the first recognition that extra work was required or that progress deviated from the original plans and specifications.
- c. Review of change orders is important as it relates to possible amendment of the specifications and plans and/or to the effecting of additional work and time expenditures on the part of the contractor.
- d. Change order files will also help identify whether contract deviation from original specifications was permitted by the owner or design professional.
- e. The change order file may also include:
  - (i) "Pending change orders" or "Proposals" which are proposals and/or claims by the contractor;
  - (ii) "Requests for Quotations" representing owner or designer requests for cost proposals for changes contemplated;
  - (iii) Status reports indicating whether the proposal, request or change order is in the request, pending, approved or disputed stage.
  - (iv) Change Order Journal - a summary ledger of all proposals, requests and change orders [See sample Change Order Journal, Appendix III]

### 11. Payment Records

- a. Progress estimates and estimates of on-site materials as compiled by the contractor and/or owner's representative.
- b. Payment requisitions
- c. Payments actually received.
- d. Requests for retainage reduction and responsive action by the owner.
- e. Payment requisitions, correspondence, etc. as well as actual payments from contractor to subcontractors, vendors, suppliers, etc.

### 12. Shop Drawings and Logs

- a. Shop drawings are typically prepared by subcontractors and suppliers to illustrate particular aspects of the construction when the designer's specifications permit alternates or provide only for a specified performance level rather than naming one proprietary supplier over another.
- b. Because the shop drawing illustrates in great detail one particular aspect of the work, it is an invaluable source of information if that particular piece of work should fail.
  - (i) If failure occurs and actual field construction does not match the shop drawing, presumption is that the failure was caused by the contractor or subcontractor involved.

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- (ii) If shop drawing depicts how the work was actually installed but the drawing does not meet design requirements, it is an indication that the designer may have paid insufficient attention to the contract shop drawings by permitting field installation to vary from design.
    - (iii) If shop drawing matches the field installation and is in accordance with the design requirements, the logical inference is that the design itself was defective or erroneous.
  - c. A prime contractor should keep a shop drawing log to record dates that it made requests to its subcontractor/supplier for shop drawings, the date the subcontractor or supplier responded with shop drawings, the date the prime contractor sent the drawings to the architect and/or engineer for review, the date the shop drawings were received back reviewed by the architect/engineer, the dates of subsequent submittals (if revisions were required by the design professional), and the date of final approval of shop drawings.
    - (i) The shop drawing log is a convenient way of checking the duration of the submittal process and of quickly ascertaining the source of any delay in approval of critical material or equipment which may have had an impact upon the progress of the entire project.
    - (ii) The shop drawing log should be a contemporaneous record rather than an after-the-fact reconstruction, for purposes of both evidentiary admissibility and probative worth
  - d. Similarly, records should be kept of engineering submittals, material and/or subcontract approvals, etc. regardless of whether or not they are in the form of shop drawings.
- 13. The Bid Estimate and Pre-bid Materials
  - a. Since bid preparation costs are overhead and a contractor can reasonably expect to win only a small percentage of all jobs bid, these factors together with the inherent time restrictions on preparation tend to result in hastily prepared bids and bid errors. For these reasons, contractors are often reluctant to disclose bid estimates and calculations.
  - b. The importance of a properly assembled bid, including material take-offs and labor and equipment cost allocations, is a convincing indication of how the contractor initially viewed the project and how he intended to accomplish his work (i.e., the contractor's so-called "plan of attack").
    - (i) Example: If a sum for "liquidation damages" is included in the bid, this is an indication that the contractor from the outset did not believe he could complete the project within the stated time.
    - (ii) Example: A breakdown or spread of fixed job expenses by the number of months the project is anticipated to take will indicate whether a contractor intended to meet the original contract completion date.

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- c. Examination of a comprehensive bid estimate will allow later determination of the reasonableness of the estimate by expert consultants and/or the trier of facts.
  - d. Adequate records should also be maintained with the bid estimate concerning subcontractor and supplier quotations, including an indication of all quotes actually received (not just those actually relied upon by the contractor).
    - (i) Records of all the subcontractor/supplier quotes can be critical if a subcontractor preferred by the contractor is disapproved by the owner and/or design professional.
    - (ii) In the foregoing situation, the measure of the contractor's additional compensation, if any, may well be the difference between the low subcontractor bid and the second low bid.
  - e. Contractor should also keep a record of "good faith" efforts regarding the employment of minorities, females, veterans and the handicapped, including the utilization of MBE and WBE contractors. For example, if contractor has effected publication of legal notices soliciting minority participation in bidding, the affidavit of publication should be included in the contractor's file.
  - f. If contractor has conducted a pre-bid site inspection, any minutes, memoranda or report of such inspection should be retained for later review, evaluation and possible use.
14. Procurement and Delivery Records
- a. Includes correspondence, delivery schedules, dispatch records, delivery tickets, bills of lading, invoices and the like.
  - b. Regardless of the format of the system, there should be a clear indication and summary of when materials/supplies were originally ordered by the contractor, shipped by the supplier, received at the job site, etc. including scheduled changes, delays, material rejections and the like.
  - c. Such records may be determinative of the question of whether delays to the project due to procurement or delivery problems are the fault of the owner or design professional (and therefore compensable to the contractor) or are the fault of the contractor itself or its supplier (in which event delay damages may not only be non-compensatory to the contractor but also assessable by the owner against the contractor).
15. Job permits, code and regulation compliance, etc.
16. "As-built" Drawings and CPMs, Maintenance and Training Manual Submissions, and other "End of Job" documents and records.
- a. As-built drawings.

By contractual provisions, the contractor may be required to maintain and submit as-built drawings indicating how the project was actually

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constructed as opposed to how it was originally intended to be constructed.

b. As-built CPM.

- (i) Not usually required as a condition of the contract, the as-built CPM is usually constructed at or near the end of performance with the intention of using same for claim resolution, defense or prosecution.
- (ii) As-built CPM has the advantage of hindsight and, if properly constructed with selection of appropriate critical activities and tasks, will graphically document event occurrences and durations and their impact upon the overall project sequencing and time of performance.
- (iii) Use of the original or "as planned" CPM network is important to establish the standard and the starting points for duration and sequence of various critical construction events.
- (iv) Disadvantages of as-built CPMs include the fact that they require subjective and often arbitrary or incorrect assumptions as to which events are critical to others. Also, the CPM does little to account for the disruptive impact of various events (the so-called "ripple" effect) or for compensatory measures and resultant increased costs that must often be taken because of construction delays.
- (v) Use of CPMs should be selective and discriminating and at a level commensurate with the documentation available from the project. It is stressed that proper schedule variance analysis must be based on the factual project events as they existed at the time that issues arose and job decisions were made and this concern also applies to the scheduling methodology utilized.

Example: It would be improper to use a sophisticated CPM schedule to analyze a project that only used a bar chart and weekly look-a-heads because to do so introduces a factor into the analysis that was not available to the project at the time such decisions were made.

c. Submission of operating and maintenance manuals, warranty information, etc.

- (i) Wherever possible, contractor should obtain signed receipts from the owner's representative acknowledging that such materials have been delivered.
- (ii) Proper documentation of delivery can thwart unfounded claims by the owner that submittal had not been made, thereby constituting unfulfilled "punch list" requirements which justify the withholding of final payment.

17. Other Documents

a. Material invoice files

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- (i) Will identify the date materials were received in the field.
    - (ii) Will help establish any change in material price ("escalation") due to time delay by means of comparison with the original contractor-supplier agreement.
  - b.. Laboratory test report files indicating the dates materials were tested for compliance with specifications and the results of such tests.
  - c. Equipment time cards or other equipment usage records
    - (i) Time cards typically record the number of hours that the equipment was actually used which is important in determining depreciation and hourly equipment costs calculations
    - (ii) Cards or other records may charge the equipment to particular items of contract work or "force accounts" for requests for extra payments.
    - (iii) Records should be maintained for both owned and rented equipment
  - d. Purchase order files, warranty information, etc.
  - e. Records of compliance with statutory claims requirements and conditions (especially when dealing with the State or other governmental subdivisions, agencies, or authorities), including especially written verified notices of claim. Examples include:
    - (i) Court of Claims Act Section 10(4)
    - (ii) State Finance Law Section 145
    - (iii) Town Law Section 65
    - (iv) Education Law Section 3813
  - f. Any information from the contractor's files, as well as information that may be obtained from the other side, from third parties or from public agencies or official sources of information, as hereinafter considered
- C. Other sources of documentation
  - 1. Government and other official records, public documents, etc.
    - a. May be obtainable by mere request or Freedom of Information Act (FOIA) request.
    - b. May be necessary to obtain by subpoena or court order.
  - 2. Records in the possession or control of the other side (i.e., the owner and/or design professional), which documents may have to be obtained through discovery proceedings as hereinafter considered.

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- a. E.g., owner's spread sheet tabulation of bids received might disclose whether or not other contractors included a disputed work item.
  - b. E.g., Engineer's Estimate or Bid Check Estimate prepared by design professional for information of owner.
3. Materials in the possession and control of third parties who are not direct parties to the disputes or litigation and which materials may have to be obtained through subpoena and interrogation
4. Insurance claim or accident investigation records and reports, related to job site occurrences
5. Court records of previous or pending litigation involving the project, which may or may not include the instant contractor.
  - a. These documents, which may be obtained from other attorneys and/or from the records of the court or county clerk's office, contain helpful factual information and perhaps even admissions which can be dispositive of issues in your litigation.
  - b. In any case, there is a natural tendency to focus attention narrowly on issues and positions in that particular dispute without considering possible ramification in other matters.
6. Correspondence or memoranda between agencies or departments, especially when dealing with the state or federal government or other political subdivisions.
  - a. Particular attention should be directed toward communications between the administering and the client agency (e.g., between NYS OGS and the Department of Education).
  - b. Significant information as to project scheduling and work is often contained in correspondence and documents between the owner and its construction lender, if any.
7. Television news or documentary film footage.
  - a. May be in existence if the project is of particular local significance.
  - b. Usually requires a subpoena or court order to obtain.
8. Union Agreements
  - a. Establish additional requirements for enlarged crews or extended overtime (e.g., a larger crew may require an additional foreman or a non-working foreman, thereby increasing costs and decreasing productivity)
  - b. Establish wage rates for particular periods to document escalation of labor costs due to contract extensions or accumulation of an unanticipated labor expenditure into a later and costlier wage period
9. Industry Standards or Guidelines
  - a. To show equipment rates - Examples
    - (i) Associated Equipment Dealers (AED rate) -for rented equipment

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- (ii) Contractor's Equipment Manual (by the Associated General Contractors) - for owned equipment
  - (iii) Construction Equipment Use Rates (U.S. Army Corps of Engineers)
  - (iv) N.Y.S. Dept. of Transportation rate
  - (v) Individual equipment manufacturer's published guidelines
- b. May also be used to establish escalation on equipment rental rates if contract period is extended.

**IV. THE USE OF DISCOVERY PROCEDURES TO DEVELOP CLAIM DOCUMENTATION**

A. The Need for Pre-Trial Discovery

1. To prevent "surprise" from the opposition
2. To understand as thoroughly as possible the factual and legal bases for the other side's position and to assess the relative strengths or weaknesses of that position
3. To prepare the contractor's own case accordingly
4. To prepare the cross-examination of your adversary's witnesses
5. To obtain testimony and documentation to assist in undermining their case (e.g., by impeaching their witnesses) and in developing the contractor's own affirmative case
6. To identify and preserve evidence and testimony (use of deposition as evidence in chief at the time of trial may be necessary if such witnesses later prove to be unavailable)
7. To replace lost or destroyed files of the contractor and/or to plug "gaps" in the contractor's records.

B. Building Your Case from Your Adversary's Files

1. There is no substitute for the contractor's own thorough and efficient documentation system
  - a. Materials may be "lost" from the adversary's files
  - b. Materials may never have reached the adversary's files
  - c. Materials may have been "purged" from the adversary's files in contemplation of litigation [this risk of encountering "laundered" files increases in direct proportion to the perceived insufficiency of contractor's own documentation]
  - d. Contractor will have no way to independently verify documents which have only been retained and preserved by the adversary
2. The foregoing notwithstanding, the use of discovery techniques can mean salvation for a less than meticulous claimant who might otherwise have to abandon a claim due to the loss or destruction of crucial documentation
  - a. Field conditions for storage of records are conducive to the loss or accidental destruction of such documents
    - (i) Field records usually kept in job trailers in conditions of dirt, dust and filth
    - (ii) Limited trailer size means limited storage space for job records
    - (iii) Documents of potential future worth are stored in any available space without regard to organization or plan
  - b. Examples of "case saving" documentation
    - (i) Additional borings "inadvertently omitted" from bid documents established a contractor's right to claim for additional grading costs on a road project when otherwise no claim would lie

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- (ii) Daily inspection reports by the owner's engineering representative documented the contractor's experience with unforeseen subsurface conditions which the contractor himself failed to sufficiently substantiate, thereby allowing the contractor to recover for additional excavation costs
- 3. Consider subpoena and examination of non-party witnesses
  - a. Assuming such a witness is not a potential third party defendant, he/she will tend to be more outgoing and informative in his/her responses
  - b. Such a witness will not have the same motivation to "launder" files or color information and answers
- C. The Most Significant Discovery Devices In Construction Cases
  - 1. The Bill of Particulars (not technically a discovery device) [see CPLR 3031 and 3042]
  - 2. Interrogatories [See CPLR 3130 through 3134 and FRCP 33(a)]
  - 3. Depositions (the examination before trial or "EBT") [See CPLR 3107, 3111, 3113 and 3116 and FRCP 30, 31 and 32]
  - 4. Requests for Admissions [See CPLR 3123 and FRCP 36(a)]
  - 5. Motion for Entry Upon Land [See CPLR 3120 and FRCP 34(a)(2)]
  - 6. Production of Documents and Other Things (Motion for Discovery and Inspection) [See CPLR 3120 and FRCP 34(a)(1)]
  - 7. Discovery of Expert Reports (limited) [See CPLR 3101(d) and FRCP 26(b)(4)]
- D. Use Of The Discovery Devices To Develop Documentation
  - 1. Normally, the Bill of Particulars is the first device to be used.
    - a. While particularization is limited by law to matters as to which the adversary has the burden of proof, it is a useful and expedient device for obtaining initial definition and documentation of many legal and factual issues
    - b. Ideally, the contractor's representative should become involved with the attorney in the development and review of a proposed demand to be served upon the adversary (and certainly such involvement is necessary when the contractor must respond to any such demand)
  - 2. The Examination Before Trial (the usual next step in New York State Courts)
    - a. While there is no statutory priority requiring that a deposition precede a motion for discovery and inspection, the governing statute does require that materials sought are to be identified "with reasonable particularity" [see CPLR 3120(a)(1)(i)]

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- b. As a result, case law has discouraged "blunderbuss" demands using broad and general descriptions, especially when such demands require the production of massive quantities of documents by the other side.
- c. The EBT notice itself may require the party to be examined to produce at the time of such examination any documents specified in the EBT notice
- d. The oral testimony of the witness at the EBT should, among other things, be utilized to identify with sufficient specificity documents which may then become the basis of a subsequent discovery notice by the examining party
- e. A further EBT may be conducted after documents have been identified at the first EBT and produced pursuant to the EBT demand and a subsequent discovery notice
- f. Attendance at the EBT of an adversary by the contractor's representative is suggested since the contractor can often lend insight and inspiration to the attorney's examination from the contractor's intimacy with the construction business in general and with the job and involved individuals in particular. This intimacy may well suggest questions and requests for information and documentation that the attorney without guidance would otherwise overlook or fail to recognize. [Note: Involvement by the client in the discovery of the adversary is generally recommended regardless of the particular discovery device utilized.]
- g. Exposure by the client to the EBT questioning process serves the incidental purpose of preparing him for the inevitable giving of his own testimony at a subsequent EBT or at trial

### 3. Notice For Discovery And Inspection

- a. The notice prepared by the contractor's attorney should be reviewed by the contractor to see if anything should be added as to which the client has specific knowledge or suspicions
- b. Experts may also be consulted in drafting the discovery notice
- c. The initial request should be inclusive of all documents which may be relevant to the issues or which may lead to discovery of further relevant matters
- d. You should count on making only one production demand since the burden and expense of subsequent demands may generate an objection to further discovery by your adversary
  - (i) May result in the court denying you the privilege of further discovery
  - (ii) Alternatively, the court may permit such additional recovery but may assess you with the costs of the same
- e. Example of contents of document discovery demand [See Appendix IX].  
Note: While the discovery demand should be all-inclusive, it should nonetheless be shortened and tailored to the particular situation and party being noticed to minimize the possibility of objection by the adversary on the ground that the demand is unduly burdensome

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4. Exemption Of Certain Materials From Discovery
    - a. Privileged matter
    - b. Attorneys' work product
    - c. Material prepared for litigation (including expert reports)
    - d. References: CPLR 3101 and FRCP 26
  5. Use Of Notice To Admit
    - a. Admission of truth of specified factual matters which are reasonably believed to be undisputed
    - b. More commonly, admission of genuineness of specified papers or documents and/or the fairness of representation of specified photographs
    - c. Obviates the need to prove the specified facts or the validity of the specified documents or photographs at trial, thereby saving both the attorney and the contractor-client significant time, preparatory effort and expense
    - d. Removes uncertainty as to the validity of documents and allows for more certain evaluation of legal posture
- E. Assembly of Documents at the Production Site
1. Initial review of produced documents should only be to determine which documents are to be copied; evaluation of significance of documents should be deferred until copies are received. This will greatly speed up the inspection and discovery process
  2. Reviewers in addition to the attorney should include the contractor's own representative and perhaps expert consultants who can most quickly and efficiently determine the significance and worth of technical materials
  3. Extent of Reproduction
    - a. Copying of all materials would be prohibitively expensive and is almost never warranted
    - b. The best method is to identify for copying only those documents which the reviewing team deems essential for further review and evaluation
  4. Methods of Identification of Materials to be Copied
    - a. Marking the originals
      - (i) Inadvisable from evidentiary standpoint
      - (ii) Will probably not be tolerated by the producing party
    - b. Use of paper clips
      - (i) Clips may fall off

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- (ii) Clips may be purposely removed
    - (iii) There is no way of ensuring that you eventually receive everything you have clipped
  - c. Best methods are either on-site photocopying or the preparation of a descriptive list of the documents to be produced
    - (i) Ensures that you receive all identified materials; can be checked off against original list
    - (ii) Originals may be clipped as well for convenience of the other side in copying
    - (iii) Lists should indicate which file or files the original document was kept in by the producing party
    - (iv) Advisable to assign each document used and copied a document number for purposes of future reference and retrieval
- F. Discovery As An Incidental Inducement to Settlement
  - 1. The discovery process and information and documents resulting therefrom allow each side to better evaluate the validity and strength of the case and witnesses of its adversary and to realistically evaluate the worth of its own case
  - 2. A change in position may result from information revealed by the produced testimony and documents of the other side or conversely by fear of what may have to be revealed by the contractor
  - 3. The significant costs (in time and money) of the discovery process and of the production and examination of requested documentation can also serve as an incentive to settlement

**V. DOCUMENTARY PROOF OF CLAIMS**

A. Delay Damage Claims

1. Is the delay excusable/Are damages recoverable?

a. Non-Excusable and Non-Compensable delays

- (i) Generally, any delay for which the contractor or any of his subcontractors or suppliers or is at fault
- (ii) Contractor will not be entitled to a time extension (i.e., delay is non-excusable) and may be subject to a claim by the owner for liquidated or unliquidated delay damages
- (iii) Naturally, contractor may not recover against the owner (i.e., the delay is non-compensable)

b. Excusable/Non-Compensable Delays (i.e., contractor entitled to time extension only)

Examples include:

- (i) Unusually severe or unanticipated weather conditions
- (ii) Strike and labor problems beyond the contractor's control
- (iii) Acts of God
- (iv) War
- (v) Financial difficulties (if caused by the owner or owner's representatives)
- (vi) Subcontractor or supplier delays if the contractor was compelled by the owner or owner's representative to use that subcontractor or material supplier

c. Excusable/Compensable Delays (i.e., those entitling the contractor to both time extension and monetary recovery)

Examples include:

- (i) Any time delays attributable to the owner's or architect's fault, negligence or breach of contract
- (ii) Lack of timely access or restriction of access to the site
- (iii) Delay in approval of shop drawings or in giving requested instructions or directions
- (iv) Late, defective or improper owner -furnished materials or supplies
- (v) Inadequate or defective shop drawings or specifications

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- (vi) Failure of the owner to make required payments
  - (vii) Changes or changed conditions in the work
  - (viii) Failure of the owner, construction manager or other party having such responsibility to supervise and control the actions of the other contractors to the extent the claimant's work is adversely impacted
  - (ix) Owner concealment of problems
  - (x) Owner failure to correct passive conditions
  - (xi) Owner's interference with the work forces of the contractor or creation by the owner of labor problems which disrupt the contractor's work
- d. Non-Excusable/Compensable Delays (i.e., those where the contractor is at fault but is entitled to recovery)
- (i) No such animal although contractor/clients will not believe it when so informed by their attorney
- e. Significance of characterizations
- (i) The impact and damages resulting from non -compensable delays must be segregated and deleted from the contractor's claim and damage calculations
  - (ii) Only impacts and damages resulting from compensable delays may properly be included in the contractor's claim
2. Categories of compensable delay claims
- a. Total interruption claims
    - (i) Delay which precludes timely commencement of the contractor's work or shuts the job down after it has started
    - (ii) The contractor may recover for costs incurred in demobilization, idle time for men, supervisors and equipment, remobilization, material and labor escalation, extended overhead, etc.
  - b. Narrow spectrum breach claims
    - (i) Delay in such instances is limited to one or more separate work items or areas of performance without significant effect on the overall contract progress and performance
    - (ii) Contractor's damage is increased cost of performance of the particular work items involved
    - (iii) Typical of delay not on the critical path
  - c. Permeating or pervasive delay claims

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- (i) The delay in such instances interferes critically with the mainstream of the contractor's performance
- (ii) Commonly involves several interacting causes which are "mutually exacerbating"; beginning and end points of the impact are often difficult to define
- (iii) Delay typically impacts work on the critical path
- (iv) Possible causes of pervasive delay may include one or more of the following:
  - 1.) Improper administration of the project by the owner
  - 2.) Poor overall planning
  - 3.) Repeated and excessive changes
  - 4.) Untimely decisions, such as response to and approval of shop drawings
  - 5.) Site overcrowding
  - 6.) Physical interferences
- (v) Effects of such delay significantly include
  - 1.) Loss of efficiency (i.e., a greater number of manhours to perform the same work)
  - 2.) Loss of productivity (i.e., a higher cost per manhour of productive labor)

### B. Specific Damage Items and Their Proof

#### 1. Higher labor costs per hour

##### a. Causes

- (i) A greater-than-planned amount of work performed in increased wage rate periods [See Appendix IV, Chart #1]
- (ii) Unanticipated overtime or shift premiums when
  - 1.) Overtime is ordered by the owner or design professional
  - 2.) Overtime is essential in order to complete on schedule (constructive acceleration)
  - 3.) Evening or weekend work is ordered or required to permit use and occupancy of the premises prior to completion

##### b. Proof of Damages

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(i) Wage escalation can be determined by comparison of anticipated labor distribution with the actual labor distribution [See Appendix IV, Chart #1]

- 1.) Use the contractor's bid estimate to construct as-planned labor distribution schedule
- 2.) Use payroll records to construct the actual labor distribution
- 3.) Use expert testimony to establish the reasonableness of the planned distribution. This may be done in conjunction with the CPM and other progress schedules as well as through utilization of graphical visual aids
- 4.) Carrying out extensions of the labor hours and wage rates (when adjusted for premium time) yields planned base labor expenditures and actual labor costs
- 5.) Difference represents total wage escalation
- 6.) Check: Does the "pre-impact" labor distribution coincide with what was planned? If so, this indicates the reasonableness of the contractor's estimate and tends to show that subsequent aberrations in labor distribution were due to the impact of particular delays or disruptions.
- 7.) For beginning-of-job delays, the actual labor expenditures will initially be lower than what was planned but will later greatly exceed the anticipated labor.

(ii) To establish additional overtime attributable to delay (and to resultant acceleration):

- 1.) From payroll records show actual premium costs paid in the "pre-impact" period and establish "typical" monthly premium figure from which you can calculate a total planned overtime for the original contract period

Caveat: The anticipated overtime costs together with the planned base labor costs should be consistent with the contractor's total planned labor estimate

- 2.) The difference between the total "planned" overtime and the actual premium time per the contractor's payroll records represents additional overtime due to the delay and subsequent acceleration

2. Loss of productivity (inefficiency)

a. Causes

(i) Substandard productivity per manhour due to fatigue, poor morale and other factors during extensive periods of scheduled overtime [See Appendix V for sample "Overtime Efficiency Curve"]

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- (ii) Loss of productivity due to stacking of trades, congestion in work areas
- (iii) Inefficient use of work forces while waiting for preceding work to be completed
- (iv) Delays and costs of recruiting, selection, hiring and training of new, additional workers not accustomed to the job
- (v) Necessity of retaining less productive workers to have enough manpower
- (vi) Inefficient use of manpower while "working around" work for which change proposals have been made but no final action has been taken
- (vii) Loss of momentum due to shifting, retraining and under-utilization of crews
- (viii) Loss of worker morale and incentive in a disorderly and confused working environment
- (ix) Unexpected amount of work performed under unfavorable conditions following owner or tenant occupancy
- (x) Cost of hiring and breaking in new crews and regaining momentum following partial or total suspension and layoff of previous crews ["learning curve" effect - See Appendix VI for sample graphical depiction]
- (xi) More work than planned during periods of adverse weather
- (xii) Wasted manpower when equipment breaks down due to lack of maintenance during acceleration or due to use of equipment in adverse weather
- (xiii) Limited site accessibility costs (e.g., not being able to follow normal routines, such as using rolling scaffolds or hoists)
- (xiv) Hopscotching of crews
- (xv) Savings lost by not being able to have laborers engaged in repetitive job operations because of disruptions to the normal flow and sequence of work

### b. Proof of damages - alternatives

- (i) Best method is if contractor has kept and retained accurate job performance records by trade on previous projects. Thereafter, if an inefficiency claim is asserted by the contractor, there is a corporate data base showing normal performance under a given set of job conditions. While such a standard may vary from job to job or from crew to crew, such cost data would be of great worth in proving the reasonableness of a contractor's manpower estimates

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- (ii) Next best method (which may be used in combination with the foregoing) involves the use and comparison of job records showing the rate of performance during the time the work is inefficiently performed compared with periods during which the work was performed under normal circumstances
- (iii) Through the use of the estimate and expert testimony, establish that the contractor's anticipated productivity was reasonable. This can be corroborated by once again plotting anticipated manhour expenditure and distribution versus actual manhour expenditure and distribution (on the base contract) and determining whether significant deviation only occurred upon the onset of acceleration and/or the various impacts previously mentioned.

Industry studies and trade publications are also available which provide statistical analyses based on empirical evidence of the adverse effects on productivity of various trades and activities resulting from such factors as sustained overtime, trade congestion, adverse weather conditions, etc.

The least desirable approach, but sometimes the only one which is available to the contractor-claimant, is the so-called "total cost" approach or some modification thereof whereby the claimant essentially uses his estimate and expert testimony to establish what the labor costs should ordinarily have been and subtracts that from the actual cost to determine the additional cost allegedly due to inefficiency. In a pervasive delay type claim, this approach (or some modified version thereof) may in fact be the only way to adequately present the nature and extent of the contractor's damages.

### 3. Loss of efficiency in use of supervisory personnel

#### a. Causes

- (i) Inability to use working foreman because of union requirements for non-working foreman to supervise larger crews
- (ii) Need for foreman to become acquainted with other aspects of job because of unexpected transfer or crew shifts
- (iii) Unproductive use of supervisory personnel during periods of partial or total suspension of work
- (iv) Disproportionate ratio of supervisory costs to productive labor costs during delays and periods of reduced work force

#### b. Proof of damages

- (i) Calculate total cost of crew including foreman and divide by number of productive workers (which number will include the foreman if he is a working foreman and will not include the foreman if he is a non-working foreman). The difference between the resultant costs per productive hour divided by the cost per productive hour with working foreman will yield the percentage of higher cost of labor per productive hour due to the accelerated schedule resulting from the delay impact

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- (ii) Payroll records and union agreement can be used to establish the necessity for non-working foreman as well as for any additional foremen who may be required due to increased crews
  - (iii) There may also be additional supervisory expense due to the extended contract period which may be calculated directly from the payroll records
- 4. Job site expenses
  - a. Caused by the extended contract period occasioned by the delay
  - b. Examples of such expenses include
    - (i) Temporary power
    - (ii) The maintenance of necessary sanitary facilities, drinking water, etc.
    - (iii) The need to maintain foremen, timekeepers, etc. for additional periods of time (to the extent not already included in labor costs)
  - c. Proof of damages is in the form of invoices, rental receipts, payroll records, etc.
- 5. Increased material costs
  - a. Causes
    - (i) Price increases due to delays in ordering and reordering
    - (ii) Necessity to purchase higher priced materials or to buy in lower quantities because of changes, including emergency purchases from local suppliers
    - (iii) Premium prices paid for rush delivery
    - (iv) Restocking, re-handling and return shipment expenses
    - (v) Storage costs
    - (vi) Weather protection of materials stored during adverse weather that should have been installed while weather was good
    - (vii) Refurbishing of materials due to exposure to the elements (e.g., rust removal, repainting, etc.)
  - b. Proof of damages
    - (i) Comparison of original quotations with actual billings and payments
    - (ii) Rental receipts, invoices, etc.
    - (iii) Daily reports and time cards showing involvement of contractor's forces in such tasks as re-handling, relocating, refurbishing, etc.

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(again, to the extent that such costs have not already been included in labor costs)

6. Increased expenses for tools and construction equipment
  - a. Causes
    - (i) Idleness of equipment on site during delays and suspensions
    - (ii) Cost of moving equipment from and returning to site because of suspensions or delays
    - (iii) Extra equipment and tool storage and security expenses
    - (iv) Increases in rental rates of equipment and delays
  - b. Proof of damages
    - (i) Invoices or contractor internal records documenting additional maintenance, repair and fuel costs
    - (ii) For idle equipment costs, contractor should use his actual costs if available and if not AED or "Greenbook" rates for rented equipment and AGC rates for contractor-owned equipment
      - 1.) The elements of ownership expenses, based on the value of the equipment, include depreciation, major repairs and overhauls, interest on investment, storage, incidentals and equipment overhead, insurance and taxes
      - 2.) Before secondary sources (i.e., either AGC or AED rates) may be used to prove damages, some showing should be made that such secondary evidence is appropriate because actual cost evidence is non-existent or unavailable for good reason. Sufficient ground for the use of secondary evidence has been found where the contractor was relatively small and therefore it was not practical to maintain the necessary records for actual costs
      - 3.) Where contractor makes claim for charges for idle equipment and elects to use the formula set forth in the AGC Ownership Expense Manual, the costs should be reduced by 50% in recognition of the fact that during idle time the equipment suffers no wear and tear
7. Extended home office overhead
  - a. The rationale is that home office overhead costs represent continuing expenses of the contractor's business which cannot ordinarily be charged to a particular contract and must therefore be allocated among the contractor's various projects on some fair basis of proration
  - b. For years, the generally accepted method for determining home office expense attributable to a delay period was per the formula outlined in the case of *Eichleay Corporation*, ASBCA 5183, 60-2 BCA Section 2688

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- c. The "mechanical imposition" of the *Eichleay* formula was rejected in 1978 by the New York State Court of Appeals in the case of *Berley Industries, Inc. v. City of New York*, 44 NY2d 683. According to *Berley*, before using the *Eichleay* formula a contractor must first show
    - (i) That there is an increase in home office activity expenses because of the delay to the particular contract and
    - (ii) That the character of the contractor's business does not permit independent proof of the increased overhead attributable to the delay without the aid of the *Eichleay* formulation
  - d. Although thus disfavored by the courts of New York State, the *Eichleay* formula remains accepted in many federal courts in both its original and modified forms. Notably, *Eichleay* is accepted by the Court of Appeals of the Federal Circuit, the circuit that has jurisdiction of all final decisions of federal agencies and the United States Claims Court [See *Capital Electric Company v. United States*, 729 F2d 743 (Fed Cir 1984)]
  - e. The *Berley* decision does not mean that formulas cannot be used in New York to establish home office overhead. Use of a formula is appropriate where actual damages are unavoidably uncertain and the equation provides a reasonable basis to calculate actual damages. A formula will be most favorably entertained if it is tailored to the facts of the case at bar, considers factors other than just the length of delay (including percentage and value of work complete on the planned completion date), and doesn't base such damages on the portion of the work not delayed. In this regard, reference is made to *Manshul Construction Corp. v. Dormitory Authority*, 79 AD2d 383, 436 NYS2d 724 (1st Dept 1981), where the Appellate Division applied a formula based on the base cost of work performed after scheduled completion with a surcharge thereon for overhead and profit.
8. Miscellaneous damage items
- a. Financing costs
  - b. Lost profit on excess costs
  - c. Claim preparation expenses
  - d. Excess bond premium expenses
9. Summary
- C. Alternative, Non-specific Proof of Damages
- 1. The so-called "whole cost" approach whereby the claimant attributes all costs in excess of its original estimate to the owner's breach
    - a. Generally disfavored as a *judicially* acceptable method of proof and should not be exclusively relied upon by the claimant if at all possible; however, many prominent construction attorneys openly admit that in *arbitration* they would not prosecute a delay claim (especially a "pervasive" type delay claim) in any other way

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- b. The approach is most likely to be accepted by the involved forum if the claimant can show
    - (i) That no other causes exist for the claimed additional costs other than the owner's liability (which is clear);
    - (ii) Both the actual costs and the contractor's anticipated costs (i.e., the estimate) appear reasonable; and
    - (iii) Disallowance of such an approach would totally deny recovery to the claimant and thereby work an extreme injustice and hardship
  - c. Even when there is contractor fault, it is possible to obtain a "jury verdict" type of award based on the relative proportion of non- fault contributions to the delay and the resulting additional costs
2. The quantum meruit or quasi contractual claim
- a. Requires proof of a material breach by the owner and an election by the contractor to rescind the contract and seek instead the reasonable value of the benefits rendered by the contractor to the owner
  - b. Under this claim theory, the measure of damages is the value of the work actually performed (including an allowance for profit) less the payments received by the contractor
  - c. Possible advantages of such approach include
    - (i) Easier to prove damages
    - (ii) Contractor's recovery may exceed the contract price
  - d. Disadvantages
    - (i) Contractor must establish both the reasonableness of his actual cost of performance and the fact that such costs were necessarily incurred as a result of the owner's breach
    - (ii) In a typical situation, there is the problem of apportioning the fault of the owner and the contractor which has been likened to "separating the white from the yoke of a scrambled egg"

**VI. THE CLAIM DOCUMENT**

- A. The Claim Document - Ideally an attractively packaged and logically organized summary of the contractor's claim, with sufficient accompanying detail and explanation as to the legal and factual theory of the contractor's claim and of the calculation of alleged damages so as to permit intelligent review and evaluation
  
- B. Purposes
  - 1. To assemble and organize the contractor's claim and documentation in a form that may be quickly and meaningfully reviewed by the attorney, the client, retained experts and other consultants in preparation for settlement negotiations or trial, and, in arbitration, for presentation to the arbitrator or arbitration panel at the time of hearing or at such earlier phase of the arbitration process as may be directed.
  - 2. To permit, in appropriate circumstances, similar review by the adversary or some designated mediator for the purpose of arriving at equitable adjustment of the contractor's claim
  - 3. To organize the contractor's claim and underlying documentation in a way which is conducive to the orderly and logical presentation of said claim in litigation, arbitration or administrative proceedings
  
- C. Suggested contents
  - 1. A well organized factual narrative or "statement of claim" from the contractor's point of view. This narrative should reference any and all significant pieces of correspondence, applicable charts and exhibits, as well as relevant provisions of the contract documents. This factual narrative is the very heart of the contractor's claim and should be thoroughly prepared with painstaking attention to accuracy and detail
  - 2. A cost analysis should also be included which details the specific areas of damage and items of cost for which the contractor seeks recovery. The cost study is best developed by presenting summary sheets backed by sufficient factual information and documentation for the entire amount claimed by the contractor
  - 3. Exhibits are a very important and convincing part of the claim document. Such exhibits typically include charts, graphs, drawings, photographs, etc. which graphically depict the impact of actionable events and occurrences upon both the scheduling and the costs of the contract work. Such exhibits typically include the following:
    - a. CPM schedules as provided by the A/E or Construction Manager
    - b. Graphical comparisons of planned progress versus actual progress incorporating data expressed in terms of both manhours per month and cumulative percent work completed per month
    - c. Bar charts of activities compiled from the CPM printouts indicative of planned starts and finishes for each work activity
    - d. Charts of actual incremental work progress which graphically underscore the lack of continuity in various work areas

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- e. Charts showing an analysis of planned versus actual labor plotted in manhours per week with significant events also plotted to show their impact upon performance (e.g., out-of-sequence work and excessive labor)
  - f. Both pre-bid (planned) and as-built CPMs
  - g. Various other bar charts, S-curves, bell curves, overlays, models, photographs and drawings which can be of any assistance in helping to graphically depict and thereby facilitate the understanding of extremely complex construction claim issues
4. Where significant questions of law are involved, the contractor's attorney may also wish to include a legal brief detailing the claimant's position. However, this aspect of the claim is often saved for the actual trial. A legal brief is seldom necessary or even desirable in the typical *arbitration* proceeding where the emphasis is usually placed on substantial justice, equity and fairness rather than legal nicety or technicalities of substantive or procedural law.
5. Expert reports may sometimes also be included in the claim document but this is a tactical decision to be made by the claimant's attorney
- D. When properly utilized by a well-selected negotiating team (usually consisting of the claimant's attorney, a knowledgeable representative of the claimant and one or more claims consultants or experts) the claim document can help achieve the ultimate goal of substantial recovery on the contractor's claim without the added expense, tremendous investment of time and energy, and uncertainty of protracted litigation or arbitration.

**VII. THE EFFECTIVE USE OF DOCUMENTARY EVIDENCE AT TRIAL**

- A. Contractor's history of regular record keeping is all-important
  - 1. Records made and maintained at the time of the actual happenings are much more convincing and therefore of greater worth than reconstructions made in contemplation of litigation when the contractor has an obviously greater incentive to fabricate and/or exaggerate.
  - 2. It is extremely important that records such as daily progress reports and the like be regularly maintained in the ordinary course of the contractor's business in order to qualify as business records which are treated as exceptions to hearsay rules governing admissibility of evidence in State and Federal courts
    - a. This is significant in that it permits entry of such materials into evidence without the necessity of calling to the stand the persons responsible for the compilation of data or the preparation of that document, a fact which can be significant where there is a turnover in office or field labor and supervisory personnel or where memories have naturally faded several years after the facts in issue.
    - b. Even if the originally involved persons could take the stand, the fact that they are not required to do so makes it much easier and more economical for the attorney to present the contractor's case
    - c. Statutory references: CPLR Rule 4518(a); Federal Rules of Evidence 803(6); Title 28 U.S.C. Section 1732(a) "The Federal Business Records Act"
- B. Documents at Trial Should be Used Selectively
  - 1. You do not want the judge, jury or arbitration panel to "lose the forest for the trees"
  - 2. Indiscriminate use of an unnecessary volume of documents makes the truly significant material lose its impact
  - 3. There is always an increased danger of inconsistencies with a greater number of documents, and inconsistencies tend to undermine the credibility and worth of your case
  - 4. In general, documents should be used to simplify and explain rather than to confuse.
- C. Use Appropriate Documents with Appropriate Witnesses
  - 1. Ordinary order of presentation of witnesses is chronological and from general to specific, thus typical order of presentation and use of documents would be as follows:
    - a. Call those who prepared the estimate, bid and sold the job, negotiated and signed the contract and generally administered from the home office to identify, describe and admit the contract and bid documents

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- b. Next call job superintendent and/or other field personnel who can testify as to actual field events and conditions. This is the time to introduce such documents as the daily reports, etc.
  - c. Next call to the stand the appropriate expert or experts who can define and discuss the impact of specified job conditions upon job performance, quality and efficiency
    - (i) Through these persons, and after establishing and introducing into evidence the supporting documentation, you may enter into evidence prepared charts, graphs and other visual aids which can be developed by the expert along with his explanation as to how source data was used to prepare the composites
    - (ii) The importance of establishing a proper foundation for graphs, charts and other visual aids cannot be overemphasized. The use of such visual aids and exhibits is generally within the discretion of the court and will not be permitted unless source data and development techniques have been properly produced and are available for examination. [Arbitrators are, by nature and by rule, much more liberal, but establishment of a sound basis should nonetheless become a matter of course for the diligent construction litigator.]
  - d. Finally, you will wish to call to the stand those witnesses who will develop the contractor's actual costs and monetary damages. These persons typically include the contractor's comptroller as well as an expert consultant or analyst. Through such persons you will introduce into evidence the payroll records, cost account records, including any force account entries, evidence of change orders and the like together with any exhibits comparing estimated costs with actual costs, the development of escalated labor and material costs, additional supervisory expenses and the like, the cost of rented or owned equipment for extended contract period, etc.
2. Documents should be organized and coded for instant retrieval
- a. Especially important during cross-examination situations requiring impromptu questioning
  - b. Documents should be cross-coded both chronologically and by subject matter
  - c. Contractor can serve his own cause by acting as a hands-on "helper" during the trial
3. The use of experts to develop documentation
- a. A qualified expert is permitted to testify as to opinions based either upon facts within his knowledge or upon hypothetical facts assumed to be true
  - b. The expert's testimony should be based upon adequate supporting material and data which is present for examination in the court room
  - c. The experts may testify concerning a number of different type construction claim items and their effects including

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- (i) Design changes
  - (ii) Construction failures
  - (iii) Delay damages
  - (iv) Interference
  - (v) Acceleration
  - (vi) Impact claims
- d. In addition to his opinion, the qualified expert may testify concerning such matters as
- (i) Any exhibits, composites or graphical analysis which he has prepared from valid source data
  - (ii) The validity of the schedule originally relied upon by the contractor in submitting his bid
  - (iii) The appropriateness of the techniques and labor allocations anticipated and planned by the contractor and hence the "reasonableness" of the contractor's bid
  - (iv) The preparation and analysis of an actual progress schedule showing where and how the job went wrong, the impact upon the contractor's work and performance and the reasonableness of the contractor's response

**VIII. DOCUMENT INDEXING AND RETRIEVAL SYSTEM; DATA BASE MANAGEMENT**

A. Manual Systems

1. Traditionally, the most widely utilized
2. Uses hard copy filing system (cross-filing recommended)
3. Should be used in conjunction with indexing cards coded according to
  - a. Topic
  - b. Category
  - c. Author
  - d. Issue
  - e. Other
4. Advantages
  - a. Most easily understood
  - b. Requires no special training
  - c. Files may be accessed by anyone
  - d. Irrelevant files are dismissed upon retrieval of relevant
5. Disadvantages
  - a. Most cumbersome to use
  - b. Permits substantial error and omission in the retrieval of documents
  - c. Storage space may be a significant problem on large volume projects
  - d. Search and retrieval is a laborious process; the speed, accuracy and thoroughness is limited by human reflexes and fallibility

B. Computerized Storage, Indexing and Retrieval Systems

1. Is absolutely essential to the management of contract documentation and claims disputes.
2. Advantages
  - a. Greater storage capacity
  - b. "Global" and specific search abilities
  - c. Greater indexing and cross-referencing capabilities
  - d. Searches conducted at electronic speed

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- e. Ability to create a project data base from which to evaluate incremental and cumulative performance, costs, etc.
  - f. Accumulated data bases from previous projects can be used as standards or performance guides on subsequent projects and in claim development
3. Disadvantages
- a. Success of system is based upon the quality of the input, which is affected by error and judgment.
  - b. Initial capital investment to convert to such a system, operational and maintenance costs, etc.
  - c. Need to hire, train and retain qualified systems operators and/or educate existing staff
  - d. Need to input all documentation or at least relevant abstracts thereof
  - e. Since index coding and retrieval keying are somewhat subjective, possibility of missing relevant documentation still is present.
4. System input - alternative
- a. Full text
  - b. Partial text or "keyword" systems
  - c. Summary, with codes to involved topics or issues
  - d. Scanned Documents – OCR Conversion
  - e. Documents converted to Adobe hyper-linked documents
5. Coding - typical classification
- a. Sender/receiver
  - b. Copy
  - c. Date
  - d. Type of Document
  - e. Content
    - (i) By subject matter
    - (ii) By issue (factual and/or legal)
    - (iii) By change order, dispute or claim number or code
    - (iv) By "keyword"
6. Claim development
- a. Even if the contractor employs no computer storage, identification and access system, such techniques may well be used by the construction contract attorney or claims consultant in the claims preparation process once a dispute develops

**DOCUMENTATION AND PROOF OF THE CONTRACTOR'S CONSTRUCTION CLAIM**

- b. The process includes
  - (i) Document review and issue identification
  - (ii) Document assembly, coding and storage
  - (iii) Schedule analysis - derived from such documents as
    - 1.) Job diaries
    - 2.) Progress reports
    - 3.) Delivery tickets
    - 4.) Invoices
    - 5.) Job photographs
    - 6.) Minutes of meetings
    - 7.) Shop drawings and submission logs
    - 8.) Drawing revision logs
    - 9.) Correspondence
  - (iv) Establishment and comparison of "as-built" and "as-planned" schedules
  - (v) Pricing of claim from computer analysis of claimant's financial records and project documents, including
    - 1.) Payroll
    - 2.) Cost records
    - 3.) Home office overhead records
    - 4.) Field office expense reports
    - 5.) Lists of equipment and invoices
    - 6.) Labor rates
    - 7.) Material purchase records
- c. Indexing of documents to enable the construction attorney to quickly identify and retrieve crucial documentation during trial or arbitration of the contractor's claim