UNITED STATES
CIVILIAN BOARD OF CONTRACT APPEALS

THIS OPINION WAS INITIALLY ISSUED UNDER PROTECTIVE ORDER AND IS BEING RELEASED TO THE PUBLIC IN REDACTED FORM ON APRIL 4, 2014

CBCA 1849 GRANTED IN PART; CBCA 2386 GRANTED: March 13, 2014

CBCA 1849, 2386

MOSHE SAFDIE AND ASSOCIATES, INC.,

Appellant,

v.

GENERAL SERVICES ADMINISTRATION,

Respondent.

Laurence Schor and David A. Edelstein of Asmar, Schor & McKenna, PLLC, Washington, DC, counsel for Appellant.

James F. H. Scott, Office of General Counsel, General Services Administration, Washington, DC, counsel for Respondent.

Before Board Judges **SOMERS**, **VERGILIO**, and **POLLACK**.

POLLACK, Board Judge.

On December 30, 2009, Moshe Safdie and Associates, Inc. (MSA, appellant, or architect/engineer (A/E)) filed an appeal from a denial by the General Services Administration (GSA) contracting officer of MSA's claims for compensation in performing additional services on design contract number GS-01P-99-BWC-00l6 for the United States Courthouse in Springfield, Massachusetts. Appellant's claim of $2,946,622.99, docketed as CBCA 1849, has been submitted in three segments. MSA alleges it is entitled to additional compensation (1) because in the development of the original design from March 2000

through June 2003, GSA changed the criteria, thereby increasing MSA's design efforts ($1,118,423.59); (2) starting in late 2003, GSA wrongfully required MSA to provide a redesign to meet the design contract's target construction budget ($1,320,378.49); and (3) GSA directed efforts on the post-construction contract services (PCCS) which exceeded the scope of the modification concerning such work ($460,431.23). MSA's claim was audited by GSA. MSA's claim accepted some of the deductions made by the GSA auditor, which accounts for differences in the audited claim versus what is now sought. MSA also claims $47,389.68 for past-due invoices. MSA originally sought $73,377; however, the parties have agreed on $47,389.68 as the balance due on the remaining invoices. The invoices remain unpaid due to a set-off as well as a counterclaim asserted by GSA.

In MSA's appeal of GSA's government claim, docketed as CBCA 2386, MSA denies that GSA is entitled to $5,275,880 as reimbursement for escalation costs which GSA asserts are consequential damages due to appellant's late delivery of the project. GSA couches the claim as one for breach of the contract's Schedule clause and asserts that because it is a breach of a contract term, it does not implicate the Responsibility of Architect/Engineer clause and therefore does not require a showing of professional negligence on the part of MSA.

On October 13, 2011, we denied appellant's motion for summary relief as to the matter of consequential damages. *Moshe Safdie & Associates, Inc. v. General Services Administration*, CBCA 2386, 11-2 BCA ¶ 34,851. We concluded that consequential damages could be available, depending on how the case proceeded.

Summary

These appeals involve four claims (three by appellant and one by GSA) which, in order of presentation in this opinion, seek added design costs by appellant for work on the original design, for work performed during a government-directed redesign, and for work performed during the post-construction phase of the project. The fourth claim involves a demand by GSA for consequential damages arising out of late delivery (due to need to redesign).

The parties entered into a contract for the design of a courthouse with the cost of construction capped at $35 million. The cap was informally raised during the design process to approximately $43 million. The record references various targets ranging from $41 million to $48 million, with MSA's last estimate (before the construction bid solicitation) being almost $45 million. We find that during the design phase, the design criteria GSA gave MSA was significantly changed, particularly as to blast and Leadership in Energy and

Environmental Design (LEED) criteria, from the parameters provided by GSA at the time of pricing. We find that those changes entitle appellant to compensation for its added costs.

Appellant has presented a total cost claim. We determine that because of the nature of the added design work, segregation of costs would be unreasonable. We have modified the total costs claimed downward, however, based that upon a number of factors, including but not limited to the "give and take" inherent in a design contract, less than perfect bidding, inefficiencies not the cause of GSA, and money left on the table in negotiations for some of the modifications agreed to and priced by both parties.

In creating the design, appellant was responsible for assuring that the project could be built for the costs allotted for construction. The contract contained a clause that provided that if bids came in over the number, appellant would have to redesign at its own costs, unless the cost increase was due to causes beyond its reasonable control. After appellant completed the design and provided estimates that reflected that the target price could be achieved, the project went out for bids. Bids, based on appellant's design, significantly exceeded the target price. After examination and various discussions, the Government directed appellant to redesign the project pursuant to the contract's Design Within Fundings Limitations clause. For the redesign, the Government increased the budget available for construction, which if anything inured to appellant's benefit.

Concerning the redesign claim, we examined the reasonableness of the original target, the actions of parties as to estimating, and the effect of the Government's earlier changes. We conclude that the Government had a right to direct redesign. We find that appellant should have realized during the initial design phase that its design would not yield bids in line with the target number and, therefore, it had an obligation to have either modified its design to meet the target or, at a minimum, notified GSA as to the probability that the design would not secure adequate bids. Accordingly, we conclude that the costs of redesign are to be borne by appellant.

We also find, however, that during the redesign the Government added design tasks which were outside the needed scope and that those efforts warrant some compensation to appellant. We find additionally that appellant was impacted by the Government's choice to change from concrete to steel frame; that in part, the scope of that change exceeded what was necessary; and therefore some compensation is due for appellant's effort.

Once the design was near completion and construction about to begin, GSA realized that it would need some post-design construction services from appellant. To accomplish that, the parties engaged in negotiations as to added work. Disputes arose during that

performance as to handling Requests for Information (RFIs), value engineering, and items, designated by appellant as exceptions. The Government made virtually no challenge to appellant's claims as to added work for the value engineering and exceptions. The Government challenged payment for the claimed additional RFIs. We find that the disputed RFI work was payable. We also find that appellant is entitled to payment for some other work items that GSA disallowed due to auditor questions.

CBCA 2386 concerns MSA's appeal of GSA's government claim for consequential damages (escalation costs) caused by the late start of construction. We conclude that for GSA to recover it needed to establish professional negligence on the part of MSA. We find it did not. We reject GSA's argument that the designer could be held to plain breach, finding that such would be inconsistent with the remedies identified in the Design within Funding Limitations clause, the Responsibility of Architect/Engineer clause, and case precedent.

Finally, we address a number of accounting matters, principally dealing with hourly rates and overhead. We reject the adjustments to hourly rates as arbitrary and unsupported. We, however, make some adjustments as to overhead.

Witnesses and Record

The record for these consolidated appeals includes appeal files and supplements that exceeded five thousand pages. In addition, appellant submitted a separate protected appeal file of over two thousand pages, and the parties entered into 165 stipulations.

During a ten-day hearing, MSA called three of its employees as witnesses. Mr. Warren Mathison, MSA's managing principal and a licensed architect for thirty-nine years, negotiated the contract and was involved in correspondence and meetings throughout the life of the contract. He spent extensive time on this project, but it was not his sole obligation. Mr. David Honn, a licensed architect for twenty-nine years, was the project manager from approximately May 2001 to the end of the project. He was not involved in negotiating the price, but from May 2001 he worked on the project on an extensive, but not exclusive basis. Mr. David Orens, who had been practicing in the field for fifteen years, and a registered architect since 2005, became involved in the project during the design phase. His role increased during the redesign and PCCS phase. He worked full-time on the project.

MSA also called representatives of two of its subcontractors on the project, Weidlinger Associates, Inc. (Weidlinger) and Cosentini Associates (Cosentini). From Weidlinger, MSA called Mr. Samuel Tinsley, a structural engineer with twenty-two years experience and the principal structural engineer on the project; as well as Dr. Robert

Smilowitz, a principal with Weidlinger (also blast consultant) holding a Ph.D. in civil engineering. Dr. Smilowitz was brought on as a consultant, once MSA realized the scope of blast requirements. He spent considerable time on that issue and meshing those requirements with other building features and functions. He has worked in the field for over thirty-four years. MSA also presented testimony from Mr. Robert Leber, a senior vice president with Cosentini. Cosentini was responsible for the mechanical, electrical, and plumbing (MEP) design, and Mr. Leber was a licensed engineer with more than twenty years experience. MSA called as a final witness, on rebuttal, Mr. Chad DaGraca, an accountant, who testified as to accounting matters.

GSA called Mr. Peter Menzies, who was the contracting officer (CO) during virtually all of the project. He testified as to negotiations on price and his dealings with MSA during the contract. Mr. Menzies has no technical degrees. GSA also called Mr. Carl Fletcher as a witness. Mr. Fletcher did not begin his involvement on the project until the construction phase. At that time, he worked for Coast & Harbor, a firm assisting GSA on construction management and inspection. He had no role in either the design or redesign. He became a GSA employee in March 2007, being assigned as project manager. GSA identified Mr. Fletcher as the individual who provided the technical analysis that Mr. Menzies used as the basis to deny MSA's requests for equitable adjustment (REAs). At the hearing, GSA relied on him to establish its contention that the contract documents adequately conveyed the work required of MSA. The Board allowed his testimony based on his review of documents, but was well aware of his limitations as a witness. Mr. Fletcher is not a licensed architect or engineer, and his resume showed no particular experience in structural or mechanical engineering, architecture, or estimating. GSA also called Thomas Malinder, a licensed architect, who had a supervisory role with GSA during the project, but no extensive day-to-day involvement. His role was at best intermittent. The project was run for GSA by Mr. Frank Saviano, an architect and the GSA project manager. He, for all intents and purposes, was GSA on this project. GSA relied on Mr. Saviano for technical management of the project.

GSA also provided testimony from Mr. Adam Gooch, an auditor with the GSA Office of Inspector General, who provided his opinion on the costing, and Mr. John Kenny, whose testimony went solely to the calculation of damages for the counterclaim.

There were two notable gaps as to witnesses. The first was the absence of Mr. Saviano, who ran the project and was the GSA official most familiar and involved with the project. Mr. Saviano had been deposed by MSA and thus, at some point, could have been available to GSA. He was clearly the GSA official around whom almost all of the significant events revolved. Because of his absence, much of the MSA testimony as to what occurred

and why it occurred went unchallenged. The second notable absence was the lack of any witness from Construction Cost Systems, Inc. (CCS), the firm responsible for providing the MSA target estimate during the design. Due to its absence, the Board had before it no material evidence to show what steps CCS took to prepare the estimates or CCS's rationale for why the numbers were not met. To the extent MSA did provide testimony as to the actions of CCS, the MSA testimony provided virtually no insight into the CCS procedures and actions. The Board also notes that neither party called a witness from Heery International, the firm providing construction management services to GSA during the design. However, the record contains substantial evidence, through documents, as to Heery's role and activities.

Findings of Facts

Pre-Contract

1. In February 1996, GSA contracted with a third party for a prospectus development study (PDS) regarding the design of a new federal courthouse in Springfield, Massachusetts The PDS was later incorporated by reference into the design contract in dispute. At the time, the PDS was primarily used by GSA to solicit funding from Congress for the project. The PDS identified a number of general project requirements and design criteria. It described the proposed courthouse as 165,000 gross square feet in area and estimated construction costs at $41,025,096, before including contingencies, design, inspection costs, markups, as well as other items. The PDS estimate contemplated a June 1999 start of construction. The PDS was a substantial document exceeding 160 pages.

2. Using the PDS, GSA submitted a fact sheet to Congress in 1998, asking for $2,323,000 in appropriations for design and review, along with funding for acquisitions. The fact sheet showed the building as containing 158,000 gross square feet and estimated construction at $35,384,000. GSA's estimate, when adjusted to include all markups, set the total project cost at $43,281,000. At the time of the PDS, the precise setting for the courthouse had not been set, although the general area was identified.

3. GSA identified a number of PDS provisions which it considers relevant to the claims. The PDS was divided into three volumes, the first being an executive summary and the third designated as appendices. Subsections of volume II were designated by the letters A through F, with the sections designated by letters having further subsections. Listed below are items that were highlighted by GSA as support for its position on blast and green issues associated with the scope of the required design. All PDS citations below are from volume II.

4. Section B, titled Functional Goals and Objectives, listed fourteen objectives. There was no indication that one objective was more important than another or that the objectives were listed in any priority order. The introduction provided in pertinent part:

> The following goals and objectives include all project requirements that define the U.S. Courts and GSA program expectations for the design and construction of the new courthouse.
>
> Goal 1: Provide a safe, efficient, flexible, comfortable, and healthy environment for the performance of all U.S. courts and supporting federal agency missions.
>
> Provide a facility that is sensitive to the art and architecture of the Region, has architectural merit, and conveys a community presence.

The first objective, Security, stated:

> Objective No. 1: Security
>
> a. Building and building occupant security (internal and external to the tenant agency boundaries) to protect against vandalism, burglary, sabotage and espionage is of prime importance in this facility. The security systems and protocols provided shall comply with a Level IV requirements based on the vulnerability assessment guidelines for federal buildings as well as all requirements of the U.S. Court Design Guide and the U.S. Marshal's Service guidelines.
>
> b. Security devices or infrastructure elements designed into the building structure and systems shall include the following:
>
> > 1. Building siting and setback with physical barriers and exterior surface materials appropriate to protect the building structure and its occupants against ballistic or blast attack.

5. Objectives 2-7, in the order listed, dealt with vehicle access control and pedestrian control at entrances; secure parking; vehicle and building pedestrian sallyports; dedicated elevators for judges and Marshals Service; screening of those entering the building;

and perimeter building security protection provided by enhanced lighting, cameras, and monitoring devices.

6. Section D of the PDS, titled Design Directives, listed fourteen categories of work, including foundations, electrical, superstructure, and interior construction. Security was item fourteen, the last item on the list. As was the case with objectives, this listing contained no language designating one item as more important than another, or attributing any significance to the order of listing. Each numbered item had subsections. Paragraph 4.1.1, Exterior Walls Concept, provided the following:

> 2. Provide an exterior wall design that will provide acceptable solutions to the following issues. Detail each issue in the design analysis for GSA's review and approval
>
> a. Blast and ballistic resistance
> b. Air infiltration
> c. Water penetration
> d. Control of corrosion and staining
> e. Thermal movement
> f. Wind loading
> g. Equipment loading
> h. Horizontal building movement (interstory drift)
> i. Building shrinkage and creep
> j. Component deflection.

7. Paragraph 4.1.2, under the subheading Exterior Doors and Windows Concept provided:

> PERFORMANCE STATEMENT
>
> It is the intent of this design that the new U.S. Courthouse be fitted with exterior doors and windows that are energy efficient and configured to allow efficient safe movement of both personnel and material, are secure, durable, and easily maintained and conform to all applicable codes and regulations.

DESIGN DIRECTION

1. The A/E design shall include but not necessarily be limited to the following Building systems, defined as all materials installed and operational: (1)

a. Windows that will be:

25% of the exterior envelope
50% level IV bullet resistant (30-06 projectile resistant)
25% operable (or allow manual introduction of outside air in an alternative approved method)
100 % insulated and low E

8. Section 14.1, under Security Concept, provided the following:

1. The A/E design shall include, but not necessarily be limited to, the following security system components or concepts: (1)

a. Exterior to the building - passive concept:

i. Building set-back from property lines, roadways and other hazards
ii. Site physical barriers, including bollards, planters, fences, or other visual or physical barriers.

b. Exterior to the building - active concepts (on emergency power):

i. Vehicle Access control to parking on site and secure parking with card key and gated access
ii. Heightened levels of exterior lighting
iii. Building perimeter and site CCTV systems with recording equipment

c. Building - passive concept

> i. Secure enclosed parking for designated tenant agency personnel.
> ii. Building occupant movement protected, directed or limited by the following:
>
> Pedestrian sallyports
> Judges secure elevator
> U.S. Marshal secure elevator
> Isolated secure corridors
> Dedicated tenant circulation corridor
> Detention cells
>
> iii. High density building curtain wall components to provide *blast* and ballistic protection (emphasis added).
> iv. Ballistic glazing in selected areas.

9. In its briefing, GSA has cited us to no other references to blast in the PDS beyond that in Section 14. The PDS does reference other documents, including the GSA Facility Standard for the Public Building Service (PBS) 100 (1993) (PBS 100). The PBS 100 was a principal GSA construction guide and defined and identified criteria that GSA required to be used in the design and construction of GSA buildings.

10. On December 17, 1998, after Congressional approval for the project, GSA published a potential sources sought (PSS) notice, where it sought A/E services for the courthouse design. The PSS identified the target price for construction at $35 million and identified the project as being a design excellence (DE) procurement. Design Excellence Competition was a formal program aimed at attracting and selecting high quality architects that would not otherwise be bidding to design a government building. The PSS stated that the A/E fee for design services would be within the 6% statutory limitation based on the government construction contract established at the time of negotiation. The notice provided that GSA would be considering a number of factors, including energy conservation and the ability of the designer to make use of "green" building techniques. The PSS identified several guides that were to be used by the designer. Among the listed guides was the 1993 PBS 100, which the PSS noted was available at GSA for review.

11. MSA received the PSS notice on or about January 6, 1999. MSA was among several A/E firms that provided submissions under the DE program for this project. Stages 1 and 2 of the competition dealt with the assessment of qualifications, while the final stage,

stage 3, was an evaluation of the designer's vision for the project. The design competition and ultimate selection did not involve pricing.

12. As part of the competition process, MSA secured a copy of the PBS 100. The parties agree that notwithstanding the reference to the 1993 version in the design documents, GSA provided the 1996/1997 PBS (96/97 PBS 100) to MSA for competition and negotiations. Mr. Mathison used that version, along with other information, to familiarize himself with the project. The 96/97 PBS 100 included a security chapter which primarily dealt with electronic security, such as closed circuit TV, special locks, panic hardware, and lighting. It also called for the structure to be designed for progressive collapse. GSA has not identified any provision of the PDS, PSS, or 96/97 PBS 100 which either calls for the hardening of the structure to resist blast loads or designates a specific level of protection that had to be met.

13. The 96/97 PBS 100 requirement that the building be designed for progressive collapse called for the building to be designed so that the failure of a beam or slab would not result in failure of the structural system below or in adjacent bays. MSA, through its structural consultant, Weidlinger, priced progressive collapse into its design proposal.

14. In May 1999, at a point when MSA had been selected for the second phase of the design competition, MSA officials, including its principal, Moshe Safdie, attended a meeting with GSA. GSA has asserted in its briefing that at the meeting, the parties discussed security issues, including a need for a twenty-foot setback from the street for the building, and that Mr. Safdie was given an undated document titled "Vulnerability Assessment, GSA Security Design Criteria." GSA asserts that the document addressed setbacks and put MSA on notice of blast concerns for the design. GSA asks the Board to conclude from possession of that document that Mr. Safdie and MSA were aware or should have been aware of GSA's interest in blast resistivity as a significant part of the design, and should have priced blast enhancement efforts (similar to those ultimately required by GSA) into MSA's price proposal. There is no dispute that Mr. Safdie was at the meeting and we do not doubt that some security matters were discussed. However, any conclusion which put the document into MSA hands would require us to engage in speculation. GSA did not produce a witness who was at the meeting, to show that Mr. Safdie received the vulnerability assessment document on that day. Instead, GSA relied entirely upon the fact that the document had written on the first page the word, "Security," and the writing was apparently in Mr. Safdie's handwriting. In rebuttal, MSA presented testimony of Mr. Honn that MSA did not receive the document until June 2001, well after contract performance had begun and, therefore, it had not been earlier received by Mr. Safdie. Mr. Honn was not at the May 1999 meeting. Apparently, Mr. Mathison was at the meeting. He, however, was not questioned as to what,

if anything, Mr. Safdie received or whether blast security as to structural elements was a significant topic of the meeting. The contention that Mr. Safdie had the document was first raised by GSA as an argument in briefing. Both prior to and at the hearing, GSA made no indication that the document or allegations as to MSA possession in May 1999 would be an issue. Moreover, even if MSA had the document in May, that was months before MSA's selection as the designer on this project. But for the inference sought as to the document, GSA produced no substantial evidence as to any emphasis at the meeting as to blast or other protection considerations. Notes of the meeting referenced the use of setbacks and other protective measures, but did not address matters as to hardening of the structure or using a more robust protective collapse criteria. Further, the document allegedly presented to MSA at the May meeting was incomplete, lacked detail and context, and was made up of excerpts from a larger document.

15. On July 12, 1999, MSA was notified in writing that it had been selected "to fulfill the design requirements for the project." The MSA design selected by GSA called for a primary building with a curved shape for much of the structure, and a glass facade curtain wall in the front, along with a courtyard which allowed for the retention of several historic trees. The design included a second building, connected to the main courthouse, to house the judges' chambers. Messrs. Saviano, Malinder, and Menzies comprised the GSA final selection panel. In a document titled "Design Excellence Exhibit," which was transmitted by facsimile to Mr. Mathison from Mr. Saviano, GSA highlighted the curved nature of MSA's design as a significant factor in the selection.

16. This design contract was MSA's first foray into designing a project for the Federal Government. In determining its price, MSA secured pricing from a number of consultants, including Weidlinger (structural) and Cosentini (mechanical, electrical, and plumbing (MEP)). Both had some previous government contract experience; however, neither played a significant role in the MSA negotiations with GSA as to the design price for this project. The evidence indicates that the consultants secured information as to the project through MSA, but does not show how much of the PDS information was provided to them by MSA. While MSA came to the contract with a world-class reputation as an architect, its prior work did not ordinarily involve blast resistivity.

17. On September 8, 1999, Mr. Menzies sent MSA a request for fee proposal that was accompanied by a document that included updated design criteria. According to GSA, Mr. Menzies had a base design budget of $2,323,000 with which to work. MSA used that criteria in pricing its cost proposal. With some (non-material) modifications, the criteria ultimately became part C of the final contract. The building was to be 165,000 square feet in area, with five courtrooms and other supporting space. Although the location of the

building site was generally identified, details remained as to the precise setting. Construction was priced at $35,000,000 with a planned construction award date of December 1, 2001. Other aspects of the design criteria that MSA was to meet included use of metric measurements, energy efficiency (commensurate with architectural values), and where possible, green criteria. The original package showed a scheduled completion duration of ninety-six weeks, which was later negotiated to seventy-eight weeks. Part C provided that, after award, the A/E would be required to participate in a vulnerability assessment that would include input from the Marshals Service and GSA security personnel.

18. The following are relevant provisions from the contract specifications provided to MSA. The provisions are set out in exhibit 2 of the appeal file, and we identify them by the page in exhibit 2 on which they appear. We list them consecutively:

> Page 1. The project description in the contract's design criteria incorporates the PDS program components and design parameters and provides:
>
> > (Reference Springfield Courthouse Prospectus Development Study (PDS) for program components, design parameters, and other related items)
>
> Page 7. The contract incorporates by reference FAR clause 52.236-22, Design Within Funding Limitations (APR 1984), often referred to at the hearing and in briefing as the Limitations of Funds clause (LOF). The proposed contract that was provided to MSA, as set out below, did not contain an estimated construction contract price for the blank in subparagraph (c) (that price was provided later on page 21):
>
> > Design Within Funding Limitations (APR 1984)
> >
> > (a) The Contractor shall accomplish the design services required under this contract so as to permit the award of a contract, using standard Federal Acquisition Regulation procedures for the construction of the facilities designed at a price that does not exceed the estimated construction contract price as set forth in paragraph c. of this clause. When bids or proposals for the construction contract are received that exceed the estimated price, the contractor shall perform such redesign and other services as are necessary to permit contract award within the funding limitation. These additional services shall be performed at no increase in the price of this

contract. However, the Contractor shall not be required to perform such additional services at no cost to the Government if the unfavorable bids or proposals are the result of conditions beyond its reasonable control.

(b) The Contractor will promptly advise the Contracting Officer if it finds that the project being designed will exceed or is likely to exceed the funding limitations and it is unable to design a usable facility within these limitations. Upon receipt of such information, the Contracting Officer will review the Contractor's revised estimate of construction cost. The Government may, if it determines that the estimated construction contract price set forth in this contract is so low that award of a construction contract not in excess of such estimate is improbable, authorize a change in scope or materials as required to reduce the estimated construction cost to an amount within the estimated construction contract price set forth in paragraph c. of this clause, or the Government may adjust such estimated construction contract price. When bids or proposals are not solicited or are unreasonably delayed, the Government shall prepare an estimate of constructing the design submitted and such estimate shall be used in lieu of bids or proposals to determine compliance with the funding limitation.

(c) The estimated construction contract price for the project described in this contract is $____.

Page 7. The contract included FAR 52.236-23 (APR 1984), the Responsibility of the Architect/Engineer clause, which provided:

The Responsibility of the Architect/Engineer Contractor (APR 1984)

(a) The Contractor shall be responsible for the professional quality, technical accuracy, and the coordination of all designs, drawings, specifications, and other services furnished by the Contractor under this contract. The Contractor shall, without additional compensation, correct or revise any errors or deficiencies in its designs, drawings, specifications, and other services.

> (b) Neither the Government's review, approval or acceptance of, nor payment for, the services required under this contract shall be construed to operate as a waiver of any rights under this contract or of any cause of action arising out of the performance of this contract, and the Contractor shall be and remain liable to the Government in accordance with applicable law for all damages to the Government caused by the contractors' negligent performance of the services performed under this contract.

Page 15. The contract contained the following provision, which dealt with delivery of the design.

> Part B - Special Provisions for Architectural-Engineer Design Services
>
> D. Delivery of services:
>
> 1. Submission, schedules for services shall be as specified in the Design Criteria.
>
> 2. Submission schedules for services may be adjusted, extended by the CO if delays arise in the providing of services due to causes beyond the control of the AE and providing the AE notified the CO in writing as to the cause and effect of the delay(s).
>
> 3. Submission schedules for services may be extended by the CO for the convenience of the Government. The AE will be consulted as to and apprised in writing of new submission, delivery schedule.

Page 21. The contract provided a listing of possible special consultants, including:

> 4. Special Consultants
>
> Special consultants shall include but are not limited to the following: Courts programming-planning-design, Fire Protection, Acoustical, Elevator, Surveying, Security/Blast consultant, and others as required and incidental to the work of this project.

On page 21, the contract also provided a design target price:

> The construction budget (Estimated Construction Contract Amount ECCA) for this project is $35,000,000 and includes escalation costs for a projected construction contract award date of 12/01/01. The Estimated Construction Contract Amount (ECCA) for additional reimbursable work items is $3,500,000 and it also have [sic] been escalated for a projected construction contract award date of 12/01/01, however reimbursable work items may or may not be added by GSA.

Page 34. The contract included design criteria that addressed the need to include energy conservation and environmental goals, directing appellant to "[d]evelop design predicated on the following basic criteria:"

> A. Sustainable Design, energy conservation, value engineering, and life cycle costing are to be an integral part(s) of the design effort. The energy conservation/environmental goal on this project is to reduce consumption and employ sustainable design/green building principles to the extent possible.
>
> B. The AE shall provide the most energy efficient design possible commensurate with architectural values. Requirements re: energy conservation, contained in the GSA publication PBS PQ100.1, Facilities Standards for Public Building Service, and GSA Green Courthouse Design Concepts Manual are to be followed.
>
> C. The AE shall closely coordinate proposed mechanical system designs and associated equipment with the applicable local utilities for their review and recommendations regarding "demand side management" (DSM) and explore the potential for the obtaining [of] energy conservation incentive/rebate programs.

Page 36. The contract set out security requirements at paragraph 25 of part C. As contended by GSA, MSA should have included money in its pricing of the design to cover the costs of incorporation of whatever security directions came out of the referenced meetings:

> 25. Security Requirements: After the A/E has reviewed the security documents and reference material provided by GSA, a security meeting will be held to discuss overall security needs and strategies to

respond to comments and concerns of the A/E based on their review of the security documents. The A/E should record their security concerns in preparation for the security meeting. The security meeting attendees will include the US Marshals, the GSA Federal Protective Service, the US Courts, the US Attorneys, and other GSA project team members. The A/E will be required to consider security requirements as an integral component of the development of plans for the three concept designs and their evolution through the tentative and construction document phases. The A/E will be required to participate in a Vulnerability Assessment that will include input from the US Marshals and the GSA Federal Protective Service. The goal of the Vulnerability Assessment is to take a balanced approach to security considering effectiveness and safety while incorporating a multi-disciplinary approach and coordinating among professionals. The A/E will be required to attend a one day GSA Federal Building Security Seminar in Washington, DC. The theme of the seminar is maintaining public access/open & inviting design while incorporating security elements and technology as an integral component of design.

Pages 37-38 of the initial appeal file set out the design schedule:

Project Administration:

A. Correspondence:

. . . .

(2) Contract documents are to be submitted in accordance with the following schedule:

Extra Field Investigation (EFI) I Report:	2 weeks
Programming Phase	6 weeks
Final Working Documents (FWD):	
Concept Phase Documents	20 weeks
Tentative Phase Documents	14 weeks
Mid-Point	16 weeks
Final Working Documents	18 weeks
Study and Report	2 weeks
TOTAL:	78 weeks

> Design Review time is built into the 78-week schedule. GSA, with input from the A/E will develop a strategy to limit the amount of lag time during review process. The intent of the proposed schedule is to provide 78 weeks from the dates of contract work to the delivery of the "100% Documents" (all reviews and corrections including on-board review @ 100% are included). Should the 100% Documents need corrections, before issue as a "Bid Set" the correction time is not indicated in the schedule.

In its appeal file for the counterclaim, GSA included a schedule that showed seventy-six weeks and had four rather than six weeks for the programming stage. The two-week difference is not material to our determinations in either of the appeals before us.

19. Nothing in the contract or in any of the design criteria (including the PDS) mentioned or incorporated the following documents: GSA Security Criteria, Draft Revision January 17, 1997; GSA Security Criteria, Draft Revision, October 8, 1997; Inter Agency Security Committee Security Design Criteria (ISC); or the 2000 PBS 100. Additionally, the contract documents provided to MSA did not contain the word LEED, nor did any document set a LEED target (such as silver).

Contract Negotiations

20. On October 8, 1999, MSA submitted its first fee proposal to GSA for $4,591,499. Messrs. Menzies and Saviano negotiated for GSA, and Mr. Mathison negotiated for MSA. Mr. Menzies acknowledged in his testimony that he had no architectural training and no understanding as to the design effort that was needed for the project. He deferred to Mr. Saviano, who took the lead. Mr. Mathison testified that in negotiating the design price, he was aware of the presence of a 6% statutory cap on design costs and he knew the 6% was to be applied against the government construction estimate. Due to the 6% cap, GSA could not enter into a design contract in excess of $2,323,000. Mr. Mathison at the time of negotiation was not privy to a specific government estimate for design work. Mr. Mathison stated that he did not fully understand the Design Within Funding Limitations (LOF) clause at the time he signed the contract, acknowledging that it was a clause which MSA had not previously encountered. In negotiating, MSA proceeded under the assumption that the site would be a flat, 2.5 acre parcel. The proposed site was in an historic neighborhood, but the exact location and placement of the buildings on the property was still in flux. Although provisions of the PDS identified the need for setback of the building for protective purposes, nothing in the contract or PDS set a specific distance standard for setback.

21. As negotiations progressed, MSA reduced its initially-proposed price and manhours estimate. Mr. Mathison explained that he was constantly confronted with charges that he was making it too complicated and seeing more work than necessary. He said that Mr. Saviano and Mr. Menzies made representations that the building requirements would not be new or untested, that GSA would reduce the scope of contract services significantly, and that GSA would streamline and limit hours needed for the design work. He said he was told it would not be as cumbersome or complicated as he understood it, and that GSA representatives would smooth the process and make it easy, enabling MSA to keep its price and hours down. He stated that MSA's reductions reflected reliance on those representations. In support of that, he pointed to the reduction in schedule time from the ninety-six weeks set out in the initial design criteria to seventy-eight weeks (an 18.8% reduction). He said that the schedule reduction was a factor in driving costs down and was in line with the GSA negotiation assurances that the project was simple and that GSA would expedite the process. He testified that shorter performance time leads to a lesser charge, stating that he "thought we could get the work done in that time frame if what the Government was telling us worked out." He testified that he was aware of "give and take" in architectural contracting and priced that into the contract.

22. Although Mr. Honn was not involved in the price negotiations, he did have prior experience in estimating. He acknowledged that, in normal practice, the hours a designer predicts for a project are typically based on the scope of work, noting that an A/E tries to match scope with work ethic and schedule. He stated that sometimes the estimate is dead on and other times it is a miss. The latter could occur for a lot of reasons, noting that the company could decide a particular area was important and spend more time on it than had been originally planned or one could miss some aspect when putting dollars together. As to give and take, he explained that it varies, not only on task, but also based on with whom one is dealing.

23. Mr. Menzies stated he never made any representations to Mr. Mathison identifying the effort that MSA would need to put forth, nor did he state that the work would be streamlined, was not new, and was not untested. He said that, in his experience, he had never encountered a contractor who had accepted GSA's explanation of what a contractor's effort of performance would be.

24. The parties negotiated over a four-to-five month period and agreed on a price of $2,322,800, substantially below the initial MSA proposal, but in line with the 6% statutory cap. MSA's final negotiated price included $1,912,800 in base services and $410,00 for three reduced options. Changes in scope or eliminations as to the following five categories accounted for approximately half of the dollar drop from the initial proposal: (1) security consultant, (2) audio visual acoustic, (3) post contract construction services, (4) independent

constructability review, and (5) value engineering. Of the above, items 3 through 5 were deleted options, which had originally been priced at $1.3 million. Other significant reductions came from MSA agreeing to reduce overhead from [redacted]% to [redacted]%, which resulted in a reduction of $212,000; and MSA reducing its man-hours based on the 18% reduction in schedule time for the work from ninety-six to seventy-eight weeks. As explained by Mr. Mathison, his final number reflected an approximate reduction from the original labor numbers of 26%, which MSA compares to the 18% in reduced time from the original schedule.

25. MSA's primary design consultants also lowered their pricing. Weidlinger reduced its price from $306,000 to $218,000 and Cosentini reduced its from $518,587.50 to $350,000. Witnesses for both stated that their reductions were directly attributable to the shorter project time. Mr. Tinsley, of Weidlinger, stated that he had some concerns as to the number, but was told by Mr. Mathison that the building was straightforward and fundamental with respect to column grids, with grids not being long span. He was also told that GSA would be very responsive to submittals. In breaking down his pricing, Mr. Tinsley testified that $165,000 was for the structure and $47,000 for blast considerations. In addition, he testified that blast considerations were also part of the progressive collapse analysis. For purposes of comparison, GSA's internal pre-award estimate for both structural and blast design was $175,000.

26. To get to the final number, GSA significantly reduced the initially provided scope of the independent constructability review (ICR). The ICR covers a number of matters, one of which was to pay for an independent party to cross-check, in detail, the construction costing of the project as the design evolved. In his post-negotiations memorandum, Mr. Menzies compared the $150,000 which GSA ultimately allotted for the service (in the negotiated contract) to the initial MSA number for the service of $454,184. He described MSA's initial proposal as overstating all levels of effort. He stated, "Although the $150,000 as agreed upon is considered less than ideal (in fact below the GE [government estimate]), it should be adequate to cover the basics at a minimum." Although the record is not entirely evident as to some of the details surrounding the ICR work, what appears evident is that Heery International was the firm that performed ICR work on the original design phase. While it was paid through the MSA contract, GSA had control over Heery's activities and GSA and not MSA had the contractual relationship with Heery. As addressed later in this decision, due to cost constraints, GSA did not pay Heery for full reviews, and accordingly Heery did not conduct them.

27. MSA and GSA completed negotiations on March 23, 2000, and entered into the design contract on April 26, 2000, for $2,322,800 This amount includes the base, $1,912,800; option 9, $60,000; option 4, $150,000; and option 3, $200,000. The contract

called for construction award on December 1, 2001. Option 4, as awarded, was the ICR option that had been reduced to $150,000. After award, Mr. Menzies prepared a price negotiation memorandum in which he addressed the disparity between the pricing of the final agreement and MSA's earlier proposal. He stated that MSA's proposal was extremely overstated in all levels of effort, with GSA estimators basing that determination upon experience on other, recent courthouse design projects and established national courthouse benchmarks. He continued,

> With such a large disparity between the GE and MSA's proposal, it would be extremely difficult at best to hope to reduce the A/E's level of effort to a point within the government's budget and maintain a level of design excellence from the designer. Although the hours as proposed must be reduced significantly, a creative approach to accomplishing the work must be embraced by both GSA and MSA in order to reach an agreement and obtain a successful design for this project. The fact that very little effort specified within the base design criteria is optional, decreases the opportunity to reduce the scope in any way in order to reach agreement with the A/E. The A/E as well as GSA must be challenged with more economical and creative means to satisfying the requirements within the design criteria.

Design Phase

28. Soon after the contract was underway (approximately April 2001), GSA (without MSA involvement) submitted a prospectus to Congress requesting $53,436,000 for the project. This request identified an estimated construction cost of $43,836,000, an increase from the $35 million set out as the construction cap in the MSA contract. GSA has conceded that the budget increase was not due to any change to the project design requirements. The estimated construction cost on which the request was based was a benchmark calculation performed by Jeet Mahal of GSA in August 2000. GSA has stipulated that the Mahal calculation did not include allowances for compliance with the GSA design criteria dated October 1997, LEED compliance, or changes as to blast resistance in progressive collapse. Congress approved the new GSA number, thereby increasing the money available for construction to more than $43 million. MSA became aware of the added funds early on, and thereafter, although there was never a formal change to the target number, both parties proceeded during much of the initial design phase as if approximately $43 million was available for construction and $35 million was no longer the target. MSA did not request GSA to formally amend the $35 million number, and GSA issued no document making the change.

29. Under the original design schedule, MSA should have completed its final concept submission within twenty-eight weeks of award. There were extensive delays created early on by a myriad of matters, including the elimination of a courtroom, changes in criteria for the Marshals Service, site coordination issues, and the introduction of more extensive peer reviews of the design. There is no evidence that these delays were the fault of MSA, which was granted additional performance time by GSA. In fact, in its counterclaim GSA does not charge MSA for any delay prior to July 2003 (the adjusted date for providing biddable documents). Instead, GSA measures its escalation claim from July 2003. There is no document which identifies payment to MSA for pre-July 2003 delays. However, during performance the parties entered into a number of modifications, some of which dealt with issues that have been noted by MSA as contributing to the initial delays.

30. As one of its contract responsibilities, MSA was required periodically to provide cost estimates to GSA to assure that the design would be able to yield a building that could be constructed for the money that was available. As with any design contract, the design was expected to evolve over time and be fleshed out from the awarded concept. The MSA estimates were to be a check on the cost effects on price as the design process proceeded its way out. The contract called for estimates to be submitted with the concept design, as well as at the development/tentative phase, and at the final working drawing phase. MSA's estimate obligation was independent of the ICR check and review.

31. As part of the concept stage, MSA was tasked with developing and delivering three concepts to GSA. From those, GSA was to select one on which to proceed. On September 27, 2000, GSA issued its first contract modification, PCO 1, for $75,000, which called for MSA to perform a pilot design/security study dealing with how to mesh security and openness concerns as to this project and others. In October 2000, still at the early stages of concept development, and almost a year before GSA approved MSA's first formal submission (the final concept documents), CCS prepared an estimate for MSA which costed the project below the target threshold. The CCS estimate was turned over to Heery for its review. On November 21, 2000, Heery provided a letter to Mr. Saviano in which it estimated that the design would cost about $38.7 million. Heery qualified its review by stating that the design it reviewed was mostly schematic, with little structural or architectural detail and no detail as to complexity of design or the overall quality of material. It reported that the square footage used by CCS was about right and it suggested an annual escalation rate of 3.5% per year.

32. MSA continued with its concept design through the first half of 2001. According to Mr. Tinsley, who was putting together the structural design, he saw nothing particularly complex at that time as to the basic structural framing. He was operating on the basis of the

96/97 PBS 100 being the standard and thus judged the progressive collapse work on that basis. He therefore included no blast hardening of the structure or other similar blast resistance enhancements. At the concept stage, MSA was providing GSA with MSA's basic design, layouts, facade, material descriptions, landscaping, and a narrative explaining MSA's design intent.

33. In June 2001, Mr. Saviano directed Mr. Honn to no longer follow the 96/97 PBS 100, but rather to use the November 2000 version (2000 PBS 100). He also directed MSA at a meeting in late June to incorporate the 1997 GSA Security Criteria as a project requirement. Neither had been part of the original negotiated package and both were being introduced for the first time. The 2000 PBS 100 introduced several significant changes to design criteria, primarily requirements for a more expansive progressive collapse standard, addition of LEED compliance, and assorted added security considerations. The 2000 PBS 100 progressive collapse criteria differed from the earlier version in a number of respects, with the practical effect being that beams and slabs had to be designed larger, more robust, and more heavily reinforced. Beams above an area had to effectively span twice the original distance, as well as support all of the load above the concentrated load in the middle of the beam. The progressive collapse changes impacted work on MEP tasks, particularly in affecting the coordination and placement of penetrations through thicker and larger structural members. Mr. Leber testified that in putting together the initial MEP proposal, he did not anticipate the degree of coordination with the structural design that he ultimately had to perform.

34. As to LEED, the 2000 PBS 100 provided, "As a means of evaluating and measuring our green building achievements, all GSA buildings must be certified through the Leadership in Energy and Environmental Design (LEED) Green Building Rating System of the US Green Building Council. Projects are encouraged to exceed basic LEED green building certification and achieve the LEED Silver Level." The language as to LEED materially increased the level and scope of green effort required in the building design. At the time of pricing, MSA was to design a building that was to incorporate various sustainability and green measures to the extent practicable. There was no set benchmark and while we find that a reasonable reading of the contract documents called for MSA to be reasonably aggressive, those requirements did not call for the project to be driven by sustainability goals, to require extensive research, or to be anywhere as expansive in attempting to incorporate green elements. GSA further compounded matters by not only calling for LEED, but also pushing MSA to comply with LEED silver level status.

35. In late June, in conjunction with GSA directing Mr. Honn to comply with the newly introduced GSA security criteria, Mr. Saviano sent Mr. Honn a document entitled "Vulnerability Assessment, GSA Security Design Criteria." Mr. Honn testified that this was

the first he had seen that document and that upon his receiving the document from Mr. Saviano in late June 2001, he recognized that it specified new design criteria, particularly relating to blast protection. While the document he was provided dealt mostly with perimeter security, it also did touch on the structure. After reviewing the document, he forwarded it to Weidlinger. Mr. Tinsley, at Weidlinger, determined that the document contained blast resistance requirements and then forwarded it to Weidlinger's blast specialist, Dr. Robert Smilowitz. GSA claimed in briefing that MSA had seen the above referenced document at the 1999 meeting with Mr. Safdie. However, GSA provided no witness to corroborate or establish that.

36. Before addressing Dr. Smilowitz's reaction, we briefly review the sixteen-page document Mr. Saviano provided to Mr. Honn at the June 2001 meeting. The document was a controlled document and one that could only be gotten with the permission of GSA. It was incomplete, lacked an index, and consisted of excerpts from a larger document. One could not tell from the sixteen pages what was left out or determine the context of what was provided. It had some references to Level C security criteria (as to windows, garage area columns, and structural members in lobbies and other localized areas). It also stated, under "Stand-Off Distances," that the preferred design criteria for Level C specifies a twenty-foot stand-off from all parking, or compensating design measures. It, however, did not say that Level C was required for this or any courthouse. Moreover, the document provided no definition of what Level C meant and no qualitative or quantitative criteria as to its application for the areas with which it was referenced. The document also addressed progressive collapse, referencing the 96/97 PBS 100 standards. The document stated on the first page, under "Security Philosophy," that its primary goal was to save lives and prevent injury, and its secondary goal was to protect federal buildings, functions, and assets. It continued that its intent was to take a balanced approach to security, considering cost effectiveness, acknowledging acceptance of some risk, and recognizing that federal buildings should not be bunker or fortress-like, but rather, open, accessible, attractive, and representative of the democratic spirit of the country. It then noted, "Prudent, rather than excessive, security measures are appropriate in facilities owned by and serving the public." On the page showing "Structural Engineering," the document states that it focuses on protection and also on managing risk and cost. It then states, "There are three basic approaches to blast design: loads can be reduced, primarily by increasing stand-off; a facility can be strengthened; or higher levels of risk can be accepted. The best answer is often a blend of the three." Finally, on the same page as the paragraph addressing progressive collapse, the document contains a paragraph tilted "Explosive Threat." It states, "Where an explosive threat, as defined by this document exists, structures shall be designed to resist blast (B) loads in combination with other loads." Nothing in the paragraph identifies a specific blast resistance hardening level or standard required for this or any other facility.

37. Dr. Smilowitz, who had extensive blast design experience, including with government projects, was familiar with the whole GSA security criteria document and, as such, recognized that what had been given Mr. Honn was missing many pages. He knew the document was a controlled document and one which would have limited distribution. He asked for a meeting with GSA to receive the full criteria and to find out which options and which levels of protection the Government wanted to incorporate into the design.

38. On June 21, 2001, GSA hosted a meeting to respond to Dr. Smilowitz's concerns. It was attended by Mr. Honn, Mr. Saviano, and Weidlinger's designers. Mr. Honn wrote in his minutes:

> GSA Security Criteria dated 10/8/97 is the bible for this project; courthouse is a level "C" Standoff distance was discussed; 20' is the goal; we are violating at 3 locations; 20' is measured from protective barrier to facade, facade must withstand a 4000# vehicle at 30 MPH; WA has reports from government with results for tests; 30" high walls are the standard to withstand impact, although this is subject to interpretation - 18" high walls are no good.
>
> If you have a lot of distance between barrier wall and your facade then sliding distance may provide adequate protection. This [sic] is no uniformity of decision making on these criteria

The minutes went into detail regarding poundage for bombs at various locations, addressed hardening the slab above the garage, and dealt with other explosion-related matters. As a separate matter of discussion, Mr. Honn addressed a GSA contract requirement (in the original documents) that the courthouse have operable windows. He pointed out that the need for blast resistance might complicate the situation and noted that there might be a conflict between sustainability and meeting levels of protection, pointing out that it made no sense to open a window that contains ballistic glazing, if one can get a clear line of sight into a room with the window open. MSA, which was less than a month away from providing the final concept submission to GSA for approval, had now been given significant new information which was to be incorporated into the design and which previously had not been identified as design criteria.

39. On June 26, 2001, as a follow up, Dr. Smilowitz prepared a detailed memorandum for GSA in which he laid out his understanding of what was being required, suggested alternatives, and asked for direction. He also confirmed Weidlinger's understanding that GSA was requiring the courthouse to be designed to Level C criteria. He wrote that at the June meeting, the parties reviewed the general requirements for physical

security identified in a seventeen-page document titled "Vulnerability Assessment - GSA Security Design Criteria" and noted the similarity between that document and the more comprehensive "GSA Security Design Criteria," draft revision dated October 8, 1997. The project specific document (the excerpt provided to Mr. Honn) appeared to be a subset; it specified the GSA Level C "Medium Level of Protection," but there were notable omissions pertaining to quantitative blast analysis and design. Dr. Smilowitz stated:

> The GSA Security Design Criteria help define the features of physical protection that will prevent large-scale injury in the event of a terrorist explosive event. However, when these criteria are applied without exception, the cost of physical protection may be significant and the impact on the architecture may be extreme. When applied judiciously, the costs may be reduced and the goals of sustainability and design excellence may be achieved without significantly jeopardizing the safety of the occupants. WAI [Weidlinger] is prepared to discuss these features should there be any questions regarding their impact on physical security. Following this, WAI requests that GSA issue a decision so the design can proceed on schedule, avoiding costly iterations of redesign and re-analysis.

40. MSA acceded to incorporate the Level C criteria. Before moving forward, however, and without going into full detail, some aspects of the complete GSA security criteria bear mentioning, for they show how much was not provided. First, the complete document is essentially a guide that provides a menu of security choices to be decided by the owner for incorporation into a design. The document describes itself as intended to complement the PBS 100, stating its primary goal to protect, but also to take a balanced approach, so as to avoid a fortress-like structure. It provides that the design is to look at prudence rather than excessive protection. It says that assignment of a level is to be based on risk analysis and that building elements may be assigned separate levels. It identifies five levels of protection. Level E is the highest and Level A the lowest. While Level C is described as being a medium level, the difference between its description and that of Level B is not dramatic. The document states that Level C terrorist protection is for use when the building is a regional symbol or has significant impact on the Government's mission, when its damage or loss will have high consequences, and where there is a verified threat. Level B is described as being used for a building that is a regional symbol or has an impact on the Government's mission, when its damage will have moderate consequences, and when there is a suspected threat. The difference between B and C is one of degree. At the time of pricing, GSA either had not made a selection or had simply failed to inform MSA of what level it wished to use. GSA never explained or addressed why Level C, which existed at the time of the negotiations, was never cited or highlighted as the intended standard during those

negotiations. As Dr. Smilowitz testified, the owner always identifies the security requirements and criteria to be used. Accordingly, he would have expected GSA to have done that here.

41. Despite suggestions made by Dr. Smilowitz to modify aspects of the protection standard (so as to reduce costs, complications, and later rework), GSA did not provide a response. That being said, the changes to the criteria did not immediately impact MSA's design effort. In late June, concurrent with the new directions, MSA was at the stage of providing GSA with the final concept design submittal. That submission was sixty-five pages, estimated construction at $42,290,364, and contained forty-six drawings (which were generally not detailed, but rather showed the general appearance and location of the facilities and some additional features). Because it had been directed by GSA to include the GSA security criteria, MSA acknowledged that the design would incorporate Level C and other blast enhancements, as well as meet the LEED and progressive collapse changed requirements. While this was not shown in the drawings provided for the final concept, MSA in its narrative told GSA that its design would now provide for concrete walls around the loading dock and mail room. The shear walls above grade (at Spring Street) would be "hardened" structurally to resist blast loads in accordance with a Level C threat. MSA identified similar treatment as to hardening of slabs over parking areas and other locations and specified hardening of various walls. At this point in the concept stage, the submittal addressed what was to be done, but had not yet addressed how that was going to be implemented.

42. At some point after July 17, 2001, GSA issued PCO 4 in the amount of $197,533. MSA signed it on July 30, 2001, and GSA signed it on September 5, 2001. The modification involved design costs associated with taking a courtroom out of the project, as well as included other GSA changes which had required rework by MSA or which had rendered some of MSA's earlier work moot. In general, the modification dealt with issues that had arisen several months before GSA introduced the added security and 2000 PBS 100 criteria. Mr. Mathison described PCO 4 as an epiphany, noting that it marked the point when MSA first began to realize that MSA's scope and costs were substantially increasing over what it had priced for the project. When questioned as to whether the compensation for PCO 4 had covered MSA's costs, Mr. Mathison commented, "probably not enough." By this point the project schedule had slipped badly. Much of the slippage in the project to this point can be attributed to the revisions reflected in PCO 4. While the use of PCO implies a proposed change order, in those instances where an agreement was reached, the parties did not change the designation.

43. In early September 2001, GSA officials began expressing concerns as to whether the project, as designed, could be built within the budget. In a September 6, 2001, e-mail

message from Mr. Robert Androkonis (Mr. Saviano's supervisor) to Mr. Edward Feiner, GSA's chief architect (copies to Mr. Saviano and Mr. Malinder), Mr. Androkonis praised the form of the design, but questioned whether it could be built within the budget. He discussed a number of concerns ranging from location of offices, to ceiling heights, to curved floor plan and skylights. He noted that the raised flooring, which he said GSA had committed to, was not in the design at that time, and stated that the estimate included in MSA's final concept submittal had been based on updates to earlier estimates and square footage, not on specifics of the MSA design. In the last page, he stated that GSA had a terrible history lately of bidding courthouses and therefore needed to be conservative in the design of the building. In closing, he stated that it was a lovely building, but "lets [sic] make sure we can build it."

44. Notwithstanding GSA's concerns, on September 21, 2001, GSA approved MSA's final concept submission. By this point, the job was at seventy weeks rather than the twenty scheduled. The delays were attributable to a number of factors, including the time required for peer review, issues concerning site conditions and configuration, changes by the Marshals Service, deletion of a courtroom, and other matters. Some had been dealt with in PCO 4. The approved concept continued to include the curvilinear design. Additionally, it remained a concrete structure, continued to include a glass curtain wall and skylights, and retained the historic trees. Although GSA has asserted in its briefing that the contractually referenced U.S. Courts Design Guide explicitly admonishes designers against the use of curvilinear forms and skylights (as they are considerably more expensive than other options), there is no evidence that GSA attempted to remove those features from the project. Rather, evidence established that GSA considered those features to be essential and not subject to GSA compromise. According to Mr. Mathison, up to the point that the final concept was approved, MSA was pretty much on budget.

45. In October 2001, the parties exchanged correspondence as to cost concerns and cost drivers. In an October 15, 2001, memorandum, Mr. Honn emphasized how the effort to save the historical trees and accommodate the size of the building had fixed the siting of the structure in relation to surrounding streets. He addressed measures to provide the required blast protection (given the siting) and raised issues as to setbacks, increasing heights of walls, adding more bollards, and increasing levels of blast resistance for the building facade. How these matters would be treated had been under consideration by the Marshals Service since June, but with no resolution. He also addressed ceiling heights, office sizes, and access flooring. Regarding the estimated cost of construction, he stated:

> Since the previous estimate was based on a similar but larger and more complicated design, the GSA Project Team, and the CM [construction manager], Heery International, concurred with the estimate adjustment method used by the architects and concluded that a separate estimate was

> not warranted. The GSA Project Team, the CM and the architects are in agreement that the estimate and budget are adequate at this phase of design. The current revised design and adjustments to the original estimate comply with the architects base contract and the change order that reduce the building size and program.
>
> To meet the allocated budget, we expect to strike a balance between building configurations and finishes. The majority of the exterior facade is actually pre-cast concrete (not stone), a material that MSA has historically had a great deal of experience with and success at designing economically. The CM who will be consulting with industry experts on critical cost items, will constantly monitor the project cost estimates. The design team will also be performing value engineering reviews with the intention of identifying potential project cost reductions should they prove viable.

46. On October 31, 2001, Mr. Androkonis wrote to Mr. Saviano by email to express his concerns as to some of the matters raised by Mr. Honn. He addressed the A/E handling of the trees in relation to meeting setback distances and pointed out that providing blast walls and strengthening the building's skin as a substitute for the setbacks would add costs to the project that were not covered by the budget. He expressed concerns as to the cost impact of curtain walls and skylights, noting they had been a factor in recent bid busts. He stated that if the concept was approved, it would be much more difficult to control project costs and, if the concept was later found to exceed authorized funding, GSA might be left to diminish the quality of finishes, reduce programmed space and/or eliminate features and functions that were important to the operation of the courthouse. He then stated, "Therefore, it is my position, if we can not deliver this concept including requirements such as raised flooring, security setbacks, blast performance, energy goals, system performance, etc., in an acceptable fashion, we do not have an acceptable concept."

47. On the same day, Mr. Feiner also weighed in with an internal document circulated to various GSA officials, including Mr. Saviano. He prefaced his remarks by stating that both GSA and the courts considered the design to be excellent. He expressed cost concerns, saying that the courts and the A/E were adamant about there being a separate structure (the chambers building) for the judges. He said that once he was assured by the A/E that it was within budget, GSA did not fight it. He expressed concerns as to meeting setbacks and acknowledged that raised floors might not be needed for the chambers if there were cost concerns. He commented briefly as to ceiling heights and security and then said:

> The cost issue CANNOT be ignored. If this concept cannot be delivered in accordance with the scope, it is time to address the issues that are the drivers. If it means some rethinking or even redesign, now is the time, not the day after a bid-bust.

On October 31, 2001, the comments of both Mr. Feiner and Mr. Androkonis were transmitted by Mr. Saviano to Mr. Mathison.

48. On November 5, 2001, MSA, Cosentini, and GSA personnel held a meeting to assemble a project team to discuss sustainability goals. LEED compliance was a primary topic. The agenda shows the parties addressed eighteen separate topics, and reiterated GSA's emphasis on meeting a silver goal for the project. This meeting demonstrates that the incorporation of LEED requirements was just getting underway and that many of the items were going to require strategies that would involve detailed analysis and study.

49. As MSA progressed through the tentative design phase, it was continually faced with having to make revisions and accommodations based on incorporating the blast criteria into the project. In a November 6, 2001, memorandum, MSA agreed to revise its design so as to create a twenty-foot setback to the facade of the chambers building, the siting of which just had been confirmed by the Marshals Service. The parties were exchanging information as to whether the courts would accept any modification to courtroom sizes and whether MSA would be given the go-ahead to treat some areas as transient (and thus no need for blast criteria). Questions as to raised flooring were resolved in favor of requiring the raised flooring.

50. On November 27, 2001, Mr. Saviano commented to Mr. Feiner and Mr. Androkonis regarding Mr. Honn's remarks of October 15, 2001. Paraphrasing Mr. Honn, Mr. Saviano stated that the previous estimate was based on a similar but larger and more complicated design, the GSA project team and the CM concurred with the estimate adjustment method used by the architect, a separate estimate was not warranted, and the budget was adequate at the current phase of design. He reiterated Mr. Honn's assurance that the CM would be consulting with industry experts on critical cost items and would constantly monitor the project cost estimates, and that MSA would be active as to value engineering.

51. As the design effort progressed into the latter part of 2001 and into early 2002, MSA continued to face issues as to what was to be included and what could be eliminated or changed, particularly in relation to protective design elements and to coordinating the LEED standards. This was illustrated in a December 12, 2001, memorandum from Dr. Smilowitz to GSA in which he addressed concerns regarding meshing GSA's requirement to design window frames to Level C, with the Marshals Service's ballistic requirements as

to the glass. MSA was pressing to use hurricane level windows in its design (which contractors were familiar with), as opposed to the untested design combination required by GSA. In addition, he addressed issues involving providing window hardware for operable windows that would still allow the windows to meet both blast and ballistic criteria. Despite offering various recommendations, MSA received no timely response and matters continued under review by GSA and the Marshals Service well into the end of 2002. Ultimately, some of the recommendations made by Dr. Smilowitz were essentially accepted, although not until well into the redesign period.

52. On February 5, 2002, MSA sent a memorandum to Mr. Saviano titled "Additional Cost Estimates." In the memorandum, MSA described (on a two-page spreadsheet) additional construction and design effort costs. For each designated item, MSA placed on the spreadsheet either an estimate of construction costs or a question mark as to those anticipated costs. Mr. Honn explained that it had become apparent to MSA that the firm had been doing a lot of work that might have implications as to the construction costs, so he provided GSA construction cost numbers for that work. In addition, as the last item in each category, MSA placed a line for additional professional fees associated with the work. At that point, MSA put in question marks as to the amount of the added anticipated design costs for each category. The spreadsheet was broken down into five categories: perimeter security; office space and prisoner delivery; courts; U.S. attorneys; and sustainability. Each had subcategories, with perimeter security showing twenty-one items. The perimeter security items did not focus on blast enhancements, but rather, focused on items such as security fencing and gates, bollards, and how to deal with sixty historic style houses. The spreadsheet included seven items under sustainability, including a major cost item for substituting a geothermal system for conventional heating, ventilation, and air conditioning (HVAC), including changes to air handlers and ductwork. A number of the items listed in the spreadsheet represented deviations or changes from what MSA had shown in the final concept that GSA had approved in September 2001. In February 2002, MSA was in the tentative design phase, a point where its design drawings were still generally schematic and structural calculations and equipment placement had just begun.

53. Mr. Saviano responded on February 7, 2002, and told Mr. Honn that the design line items should come out. He said, "[T]he GSA Cover inserts a pro rata design cost automatically." MSA understood the direction to mean that MSA did not need to ask for additional design fees on similar requests, but rather, when an item was included, MSA would be compensated through a percentage application. MSA complied with Mr. Saviano's directive. When MSA sent a revised version to Mr. Saviano, several weeks later, it specifically did not include a line or space for professional fees. The March 7 submission showed $4,577,945 for the construction. The sustainability category accounted for $1,753,500 of the increased costs. While many of the items were not ultimately included,

each involved some additional study or design effort by MSA. The treatment of windows continued to be an issue through February and March 2002.

54. On March 31, 2002, MSA submitted a set of tentative design drawings to GSA. It was at this stage that Weidlinger had begun to size its columns and beams and Cosentini was zeroing in on equipment and making sure it could fit. At completion of the tentative design, the design was to have progressed to the point where all major building systems and components were represented on the design drawings. Because it was added later, the tentative drawings did not have a geothermal component. The geothermal change, although substantial, is not an issue as to the design claim. MSA was compensated for its efforts in changing to the geothermal system in PCO 6.

55. On April 26, 2002, F. Joseph Moravec, GSA's Commissioner of Public Buidling Service, issued a memorandum for assistant regional administrators. The subject was "Implementation of the Interagency Security Committee (ISC) Design Criteria Regarding Site Selection." Although not specific to this project, the memorandum reflects the mind-set resulting from the September 11, 2001, World Trade Center attacks. The memorandum conveys a clear intention on the part of GSA to provide measures in its site selection for federal facilities to protect the federal workforce and visitors. While GSA had protection concerns prior to the Trade Center attack (specifically the bombing of the Federal Building in Oklahoma City in 1995), concerns took on even greater importance after September 11th.

56. On May 16, 2002, Heery provided a construction estimate of $41,365,898 for the tentative design. Thereafter, on June 14, 2002, Heery prepared an updated estimate, this time at $45,483,007. The latter was based on the tentative design submittal from MSA dated March 31, 2002. In a July 3, 2002, memorandum from Mr. Honn to Mr. Saviano, Mr. Honn estimated construction costs at $43,460,593 for the building and $3,081,350 for site work.

57. At the end of July 2002, GSA approved the findings and recommendations of the special security report that had been ordered in PCO 1, at the start of the design. MSA charges in its claim that GSA directed it to include aspects of the report into the design. GSA denies giving such direction. GSA charges that MSA incorporated provisions on its own. Neither party provided any specifics, and we do not find the security report itself played a major role. By the time the security report was issued, the GSA changes as to progressive collapse, hardening, and LEED were already imbedded as contract requirements. At that point, MSA was designing to Level C and GSA was holding MSA's feet to the fire as to LEED efforts.

58. In August 2002, CCS provided GSA with the 50% construction documents estimate. CCS based the estimate on drawings and specifications dated July 12, 2002. The next step was preparation of the 95% drawings, with the final step being the conversion of the 95% drawings into final drawings.

59. The parties continued to discuss MSA's allegations of extra work. In an e-mail message dated November 5, 2002, from Mr. Saviano to Heery, with a copy provided to Mr. Honn, Mr. Saviano identified several design items as being above normal project costs and stated that work associated with the items might be compensable to MSA. The items were (1) landscaping, sidewalks, exterior and street lighting, and employee parking lot, (2) geothermal system and up-charges from conventional HVAC, architectural, and mechanical sustainability features, (3) electrical utility related items, and (4) reinforced architectural perimeter features, including walls, bollards, security benches, and monumental vehicular stops at the main entrance. A number of these items later became the subject of PCO 6, which was executed in late November 2003.

60. A December 6, 2002, internal memorandum from court officials identified several items that could be argued as not having been in the prospectus budget. Among them were remediation costs due to poor soil conditions, $150,000; costs of required progressive collapse higher than the benchmark, $160,000; and more costly materials, landscape, and upgraded bollards because of the building's location in a historic district. The memorandum then discussed value engineering and noted that the project had been delayed for eighteen months by GSA Central Office's decision to eliminate one courtroom. It said that Heery had estimated those costs at $2,240,000.

61. On December 16, 2002, Mr. Saviano sent an e-mail message to Mr. Honn titled "Identification of Design Items Above Contract Criteria," in which he stated:

> Here is what I have come up with for Above Contract Criteria.
>
> > ISC Security Design criteria and USCOE protecting Building and their occupants from airborne hazards look like they were added after the initial design contract by our security team. Moving Air Intakes to roof, if attributable to the added criteria, has a major cost impact that MSA should provide a ballpark cost for.
> >
> > Facilities Standards at time of contract was PBS-PQ-100.1 dated 12/23/93 and GSA Issued new Facilities Standards Revised 11/00 for inclusion however GSA's understanding was that new standards were far less prescriptive and should not add any cost – However,

> MSA and consultants such as Cosentini may and should indicate if they can identify any additional cost items based on the updated standards that were not included in the original contract version.
>
> Please let me know if you have any added cost related to the criteria changes.

62. MSA wrote to Mr. Saviano on December 27, 2002, providing a list of items which MSA described as scope increases (and thus cost increases) from the 1996 PDS. Among the items included was having to reinforce concrete to meet progressive collapse and to meet other enhanced blast criteria, various LEED-related items, intake air at the roof, and sitework (as affected to accommodate security). While not all items were costed for construction impact, those items for which MSA did include a cost totaled $2,315,000 in estimated added construction costs. MSA did not provide a figure for added design costs.

63. In February 2003, Mr. Honn was informed by GSA that "GSA Washington" would not permit the project to go out for construction bids if the estimate based on 95% complete drawings exceeded $45 million. Mr. Honn then prepared a memorandum to MSA and consultants, titled "Cost Control Strategy." There he said, "The basic strategy then, is to remove some items from the bidding set and add them back during the contract negotiation phase." At the hearing, he acknowledged that removing elements from a design to make an estimate fit a specific number was "unusual." MSA also made a wholesale 1% reduction in material. Mr. Orens, when asked, could not explain the basis of the reduction. What is evident is that in February 2003, MSA and GSA knew that in order for the project to go out for bids, MSA would have to get to the $45 million number.

64. CCS prepared an estimate dated March 19, 2003, which Mr. Mathison transmitted to GSA under cover letter of April 4, 2003. Mr. Mathison identified it as the 95% cost estimate, priced at $44,992,850.71, which is 99.984% of GSA's limit for the project. Heery provided a review of the estimate to GSA. Both the CCS estimate and Heery review showed $45 million plus or minus. On March 14, 2003, a few days before CCS finalized its March 19 estimate to MSA, GSA and MSA held a meeting to finalize costs. GSA contends that at that meeting, Mr. Honn disparaged the capabilities of CCS and showed a lack of confidence in the CCS estimate. More specifically, GSA points out that Mr. Honn wrote "HA" next to a comment attributed to CCS and having to do with CCS due diligence in the preparation of the construction estimate. The word "HA" was placed on a sheet next to the wording, "This cost estimate represents our opinion of probable construction costs for this project. We have exercised due professional diligence in the preparation of this estimate. Since we have no control over final market selection, bidding strategies and market conditions, no guarantee is given or implied with this estimate. This estimate assumes a

normal market condition." It should be noted that the quoted language, which is essentially a limited disclaimer, appeared on all CCS estimates.

65. In addition to Mr. Honn's comment noted above, GSA charges that Mr. Mathison presented testimony which calls into question the completeness and adequacy of the work of CCS. GSA charges that Mr. Mathison testified that MSA did not expect CCS, in preparing construction estimates, to interpret the things that the contractors had to interpret in preparing bids. GSA further charges that he admitted that MSA did not direct CCS to provide blast resistance in any of its estimates. For purposes of context, Mr. Mathison (later in that same line of testimony) stated that he expected CCS to understand contractor reactions to the design and was sure CCS made judgments as to that. He further stated that blast resistance was part of the design MSA was required to prepare and as such would have been considered by CCS in its estimating.

66. GSA relied on the CCS estimate with an assumption that it had been prepared using proper estimating techniques. MSA, in defending the adequacy of the CCS estimate, cites to the fact that Heery performed a review of CCS's estimate for GSA and the Heery estimate and CCS estimates were in line. While that is correct to a point, as we address later, Heery performed that review while operating with significant limitations and thus its results are not particularly probative as a baseline for purposes of buttressing the CCS estimate.

67. As had been the case with other stages, the period up to the 95% complete contract documents was extended for a significant period by GSA. MSA continued to receive comments on a rolling basis until receiving final approval of the 95% design in July 2003. MSA has stated that while the delays for this as well as earlier stages did not have a day-for-day effect on its operations (for MSA continued to work on the design), the delays at times resulted in MSA having to go back and modify items that it had already incorporated into the design. GSA comments, even if late, had to be incorporated into the design. At no time during the design period did GSA issue MSA a cure notice or blame MSA for any delay in performance.

68. On May 22, 2003, Mr. Mathison wrote to Mr. Menzies and Mr. Saviano regarding charges for additional services that MSA believed it was being required to perform on this contract, some of which had been part of discussions in November 2002. Among the more significant charges being sought were approximately $63,471.76 for landscape architectural services; $51,468.41 for additional commissioning and sustainability services; $80,347.02 for additional geothermal design services; $177,000 for extended CM design phase services; $166,035 for above-standard design services for the courts, U.S. Marshals Service, and U.S. attorneys; and additional funds for Heery of $28,600 for estimate review and $72,600 for coordination review. (While Heery had no contractual obligation to MSA,

GSA was nevertheless funding Heery through the MSA contract.) MSA also sought $14,559.48 for revisions due to revised PBS 100 criteria. In summary, MSA identified sixteen items at a cost of $863,460.39.

69. On July 15, 2003, GSA issued the complete set of MSA contract documents as a bid set to potential bidders. Bids were opened on August 15, 2003. The low bid was $65,183,000 with five bids closely grouped. Each potential contractor had been pre-qualified. The concrete costs in the low bid exceeded the 95% estimate by $10,162,408. The concrete costs of $650 to $750 per cubic yard reflected in the bids were more than double the normal prices for concrete in major markets such as Boston. Doors and windows exceeded the 95% estimate by $3,824,594. The addition of the geothermal system increased the construction costs by almost two million dollars. The construction costs projected by CCS's 95% estimate indicated a square foot price of $272.68. Bids came in between $400 and $429 per square foot.

70. The design claim centers on the reasonableness of the parties' design expectations and whether GSA fundamentally changed the design criteria through introduction of the 2000 PBS 100 and the GSA security criteria, and whether GSA failed to meet its promises as to streamlining and cooperation. GSA acknowledges that the introduced documents were neither cited in the original contract nor directly incorporated by reference. However, GSA asserts that the level of effort and criteria to be used for this project was or should have been evident to MSA from the contract documents provided. GSA also asserts that, to the extent MSA had to perform beyond what was set out in the contract, that effort fell into the normal "give and take" that should have been anticipated on a design contract. GSA further denies promises of streamlining and asserts that much of MSA's added work was due to MSA incorporating into the project on its own various features of the PCO 1 security study. MSA says the changes made by the criteria added by GSA were substantial and their combination turned the design project into a research and development project for balancing openness, security, blast resistance, and LEED criteria. MSA charged this was a combination that no one had encountered before and which had not been specified in the design contract documents.

71. We set out here additional evidence relating to the above arguments. Mr. Mathison acknowledged that the PDS "Security Concept" directed the A/E to include exterior "passive concepts," such as setback and physical barriers, as well as active concepts, such as vehicle access control, exterior lights, and closed circuit television (CCTV) systems. He said it was reasonable for MSA to understand the references in the PDS to bollards and other physical barriers to not necessarily be related to specific concerns as to blast enhancements in the structural elements of the building. Rather, he said those items could be related to preventing a truck from hitting a loading dock, or preventing a vehicle from

parking on a lawn or accessing a pedestrian-only area. He testified that the blast criteria required by GSA was well outside the scope of what MSA priced in its design.

72. As to the physical protection measures set out in the PDS, MSA asserts, "Even when they do serve a function related to security of the building, this does not necessarily [mean] an explosion." Mr. Mathison said he interpreted "security" for the contract as being people-related and focused on electronic security, an interpretation that he considered to be consistent with the documents referenced in the contract and consistent with his prior experience. At one point, he described his understanding of blast requirements to be preventing damage caused by someone carrying a backpack. In responding in its brief to GSA's charge that Mr. Mathison was familiar with the use of a truck bomb (as occurred in Oklahoma City), MSA characterized that point as irrelevant, asserting that security criteria for a building are to be selected by the owner. MSA continued, "It is not the task of the architect to speculate as to what criteria the owner wants, and to establish levels of protection." With that said, Mr. Mathison did acknowledge that he saw references in the contract documents to MSA having to provide a "security blast consultant" and understood that reference to address blast protection. He, however, then emphasized that the blast consultant provision did not assign any specific level of blast resistance.

73. Regarding the inclusion of blast design elements, Mr. Tinsley testified that the original contract documents did not require blast resistance for the building structure and outer walls, and at the time the contract was signed, the 96/97 PBS 100 was in effect. He said that document had no reference to blast protection for the structure of the building. He acknowledged that the 96/97 PBS 100 did require progressive collapse protection (which Weidlinger priced in), but pointed out that progressive collapse and blast resistance are two different concepts. Each requires a separate analysis and a blast load may not necessarily cause a collapse, though it could. Progressive collapse, as expressed in the PDS that Weidlinger used for pricing the design, did not call for hardening of the exterior structure or designing the facade to be blast resistant.

74. Mr. Mathison, Mr. Honn, and Mr. Leber testified that neither the PSS, the PDS, nor the contract called for the building to be LEED certified, nor did the GSA documents include many of the LEED requirements ultimately imposed. LEED certification is a process of awarding points for various "green" components. The more or higher value components that are included, the higher the point total. GSA contends that even though LEED was not mentioned, the various "green" requirements that constitute LEED were identified. GSA, however, has failed to identify sufficient specifics. As pointed out by MSA, the earlier PBS 100's had referenced ASHRAE (American Society of Heating, Refrigerating and Air Conditioning Engineers) 90.1 Energy Efficient Design of New Buildings. In contrast, the 2000 PBS provided "GSA's sustainability objective for LEED certification will likely be

associated with trying to beat ASHRAE 90.1 energy performance by defined percentage levels."

75. Mr. Tinsley testified that the most significant impact on Weidlinger's design effort could be attributed to meeting the Level C standard. As applied by GSA, that meant that the entire courthouse, including the facade and building structure, had to be blast resistant and, therefore, more robust. He said that the perimeter of the building facade needed to be strengthened to resist the blast pressures from the street threat. Therefore, all perimeter concrete had to be designed for blast resistence. He stated that as a consequence of the Level C requirement, he had to calculate and address the distribution of loads to various features such as windows, concrete walls, precast, and floor slabs. He identified walls with windows as the most complex and difficult, noting that the already complex glazing system for the windows required substantial coordination with structural engineers. Normally such coordination would be limited, but here, however, due to the hardening and blast requirements, the window system was required to transfer blast loads back to the concrete structure. The requirement for operable windows that met LEED standards further complicated matters, requiring window latches, insulation, and other treatments to be designed for a Level C standard. In addition, the imposition of the Level C standard significantly increased the number of design hours incurred because of the complexities of designing blast resistence elements into a building with varying floor levels, rather than a building with flat slabs. Shear walls that would otherwise have been designed to resist lateral and vertical load now had to be designed to resist blast loads as well. Coordination with the MEP designer was affected as changes impacted vertical penetration, as well as penetrations through the exterior. Even the geothermal system had an impact on Weidlinger, as it interfered with the design of underslab drainage and required coordination with the MEP designer and MSA. MSA, as the primary designer, had to be involved in all of these matters. It particularly spent significant time in dealing with achieving Level C compliance for the window design. Various MSA witnesses testified that much of the design became a research and development project, attempting to figure out how to mesh blast protection, ballistic, and other security issues, with the GSA demand that LEED compliance also be met. GSA presented no credible evidence to challenge this testimony.

76. Mr. Leber stated that part of the additional time Cosentini spent on the MEP design was due to fact that the LEED concept was new at the time. Mr. Fletcher confirmed that LEED was evolving. Mr. Leber testified that LEED introduced multiple additional considerations, such as energy optimization, green power, irrigation reduction, alternative wastewater technology, and low emitting material, all of which he had to look at as part of the project. Mr. Leber said that due to LEED, Cosentini was required to assist the government LEED consultant in researching the feasibility of virtually all available LEED points, as well as additional post-sustainability items that GSA requested. MSA and

Cosentini were also required to investigate the use of multiple fuel source systems with a separate but similar system for the U.S. Marshals Service space, green building power sources, fuel cells, photovoltaic arrays, solar collectors, waterless urinals, and grey water for irrigation. After MSA investigated and priced the systems described above, GSA decided all were unaffordable, and they were eliminated from the project.

77. Another major change introduced by the 2000 PBS 100 was a requirement to move air intakes from a lower level (as planned) onto the roof. The 2000 PBS required that in buildings four stories or higher, air intakes had to be located at the fourth floor or higher. This was a security measure to protect a building from someone introducing contaminants through the ductwork. Additionally, the 2000 PBS added a protection requirement for utilities located within fifty feet from a loading dock, as well as for entrances and parking. Finally, the 2000 PBS required that utilities be concealed and blast protected. As noted in Finding of Fact 61, Mr. Saviano acknowledged that the move of the intakes to the roof constituted a change. MSA was never paid for that extra design effort.

78. To support its assertion that the original contract documents adequately and accurately conveyed the GSA requirements as to LEED and security measures, GSA cited various provisions in the PDS, and particularly the requirements for bollards and other protective features to protect the building against "ballistic or blast attack." It also cites the requirement for a blast consultant; the fact that Mr. Mathison testified he was familiar with the use of trucks to deliver bombs to a federal buildings; and a requirement for twenty-foot setbacks, all of which GSA said should have put MSA on notice that the design required enhanced blast protection. Additionally, GSA repeatedly emphasized that security and the protective items were set out as "Objective No. 1," citing a listing in the PDS of goals and objectives for the project. As pointed out earlier, "Objective No. 1" was simply the first item in a list, a list that was not identified as being in any priority order. It provides little else As to LEED, GSA essentially relies upon language in the PDS which provided that the successful designer would be expected to make use of green building techniques..

79. In its brief, GSA charges that many of the changes asserted by MSA were the result of MSA incorporating results of the PCO 1 security study into the design on its own and without consulting with GSA. GSA does not provide details. More importantly, the study was not completed until July 2002 and the directions as to blast, progressive collapse, and LEED were all delivered in the summer of 2001. GSA did attempt, through Mr. Fletcher, to equate the information provided in the initial contract with the requirements for LEED compliance. His testimony lacked specificity. Moreover, in other testimony regarding building commissioning, Mr. Fletcher conceded that MSA was owed some additional money for the LEED design. He also acknowledged that LEED was in a process of migration and flux at the time. As to blast enhancement, his testimony was conclusory and

without detail. He relied heavily on the provision of the contract which advised MSA of intended meetings after award as to security. He appeared to conclude that because GSA had identified in the contract that there would be future meetings to address security concerns, MSA was responsible for designing, without any cost adjustment, whatever came out of those meetings. While the reference to future meetings could be read as an indicator of some anticipated alterations, nothing in the contract suggested fundamental changes to the project's scope. Finally, Mr. Fletcher acknowledged that the progressive collapse requirement also evolved during the life of the design contract. He recognized that changes as to progressive collapse requirements warranted some price adjustment.

80. One final matter before addressing the redesign phase. The contracting officer, Mr. Menzies was questioned by GSA counsel regarding MSA's claim for added costs due to changes in the design. Mr. Menzies testified that he did not know details about MSA's claim for having to perform added work until the matter came to trial. When asked by the Board to clarify, pointing out that Mr. Menzies had issued a final decision in 2009 and thus had to have know something by then, Mr. Menzies testified that he first learned of MSA's allegations of a changed scope of work at the time he received REAs on each item. In later testimony he said he first learned of the claim in 2009; however, that is inconsistent with his having received the REAs in 2008. As to the effect of his knowing when he did and its impact on GSA, he provided testimony speculating that had he known of MSA incurring additional design costs, it was possible that Congress may not have been willing to pay and could have killed the project. Finally we note this last item. When asked (in context of design claim items) if Mr. Saviano ever informed him that there was a likelihood that MSA would be asserting a claim for additional compensation relating to the design, Mr. Menzies stated, "I don't believe so, no." When asked if anyone from GSA informed him, he again said no.

Bidding/Redesign Phase

81. Construction bids were opened in August 2003, and they dramatically exceeded the estimated pricing. In order to salvage the process, GSA convened a meeting in early September 2003, which included MSA and various bidders. The meeting was an attempt to identify why there was such a divergence between the bids and the estimate. One of the participating bidders, Clark Construction, cited a number of reasons that contributed to the pricing of its bid, including that the size of the site impacted the ability to stockpile backfill; the geothermal feature affected schedules between site excavation and the start of foundations; there were a limited number of concrete subcontractors in the northeast capable of constructing a building of this nature; and there were few available subcontractors. Clark highlighted that there was less competitive bidding as to glass and glazing, concrete, elevators, and HVAC, with the latter two due to qualification limitations. Clark stated that

using metric measurements had very little effect on its cost and that labor rates in Springfield and Boston were about the same. Clark pointed out that the extensive amount of perimeter concrete walls resulted in an inordinately high ratio of vertical to horizontal concrete in the building, a situation that invariably increases costs. In describing what it considered to be fundamentally different on this project as opposed to other courthouses, Clark identified building size and configuration, the design for blast resistance, and the LEED certification as elements that affected its bid price.

82. The record contains a number of other comments and findings as to the reasons for the high pricing. In a September 11, 2003, e-mail message, Mr. Moravec, GSA Public Building Service Commissioner, addressed a conversation with Heery in which Heery reported that several potential contractors said that the job was very intricate, detailed, and high quality, and that they bid accordingly. Mr. Morovec's e-mail message highlighted the following factors to explain the overrun: the structure (based on higher post 9/11 security standards), LEED features, scope creep, and finishes. He criticized Heery's role and acknowledged the irregular set up with Heery as the CM. He focused on the fact that Heery had not been operating with a contract, even though it had been involved on the project since 1999, and concluded, "This is a highly unusual and irregular CM relationship, to say the least, and I would be interested to know why we have proceeded in this manner." He then conceded that he did not see how GSA could hold Heery responsible, given the fact that Heery had not been asked or paid for its normal services.

83. On September 17, 2003, in an e-mail message from Mr. Androkonis to various other GSA officials, Mr. Androkonis described the plan for going ahead. He said GSA would select one of the five contractors who bid the project and pay the firm a small fee to work with GSA and the A/E to bring the project within budget. If that would not work, he would direct the A/E to redesign on the A/E's dime. In an e-mail message of October 6, 2003, Mr. Moravec again questioned how the bid bust could have happened. He stated that the region had two years to raise the alarm as to what the actual costs of the designed project might turn out to be. He noted the gross mis-estimate of the actual cost to construct and said the blame was neither MSA's nor Heery's responsibility. He said it falls on the region, as "[w]e're supposed to be a professional development organization. A bid bust of this magnitude does not, frankly, inspire confidence."

84. In a memorandum to Mr. Saviano, dated October 16, 2003, Mr. Mastroyin provided his take on the bid bust. He first stated that GSA, in preparing its in-house comparative estimate, was aware of scope increases in general conditions, security, and sustainability relative to comparable courthouse projects. He explained that to account for the added criteria, the project was priced at 20% greater, stating that GSA assumed the 20% differential and favorable market conditions would compensate for the significant criteria

additions. He said that GSA also relied on favorable estimates from the A/E and CM. Under the subheading "GSA Criteria Loading in General Conditions," he listed a number of factors which he understood contributed to the cost, such as pre-qualifying of general contractors and selected subcontractors, LEED commissioning, LEED construction, construction excellence, construction and document security, electrical supply-side security, mechanical coordination, protection of existing historic trees, inclusion of full geothermal system, site geometry and size. He identified those as in addition to costs associated with security hardening, blast, and barrier requirements that he cited as above standard. He also noted that, in addition to the price for concrete being more than double, another item driving costs was the curtain wall envelope including the blast criteria, which "strongly influenced the decision to utilize a hollow metal system that results in extremely limited competition."

85. Heery formally provided its take in a letter of October 21, 2003. It said it had been tasked with performing a review of the CCS estimate prior to the bidding. It explained that a review of a cost estimate addresses items within the cost estimate itself, i.e., unit prices, items missing or misinterpreted, computational errors, and so forth. It continued that a detailed cost estimate, which Heery emphasized it did not perform, would be based upon the plans and specifications and would entail both quantitative metrics, including material takeoffs and specific systems, as well as a variety of other aspects influencing costs. Heery noted that those areas would include items such as the use of proprietary specifications, the impact that the construction details and schedule requirements have on means and methods, the availability of specified material,and so forth. Heery concluded that the items, which it described as those important factors, were beyond the scope of Heery's review (what GSA was paying for).

86. In the letter, Heery, relying on information from the September meeting with bidders, addressed some of the differences between the 95% estimate and received bids. Heery observed that all bidders appeared to price the same project, all indicated that the construction documents were clear in intent, and all understood the architect's desired result. Heery listed five areas with significant deviation from the 95% cost estimate, which alone accounted for $20.4 million. Of the five, the concrete variance of approximately $10 million was the single greatest item. Heery noted that the concrete variation occurred in both precast and cast-in-place concrete and that some of bidders pointed out that the required quantity of reinforcing steel per cubic yard was significantly higher than would normally be expected. It appeared that the complexity of the cast-in-place concrete formwork, installation of the large quantity of reinforcing steel, and placement of concrete had a much greater impact on costs than anticipated.

87. Heery also identified the following items as driving costs: variations in the slab elevations due to the requirement of raised flooring, large floor-to-floor dimensions, perfect

rough opening details in exterior cast-in-place concrete walls, large quantities of vertical concrete, and the extensive use of architectural concrete in the basement and garage area. Some bidders indicated they did not read much flexibility into the specifications with respect to use of larger precast panels. Heery concluded that some of the unanticipated structural costs might be directly attributed to the interpretation and/or application of the new blast and progressive collapse criteria, as well as the final detailing of the building components. It recommended that GSA look at the performance of the double exterior wall assembly of the exterior cast-in-place concrete wall and precast concrete panels, as well as the associated structural connection detailing, in an attempt to achieve better efficiency in pricing. Heery noted that it had researched recent bid results for any federal courthouse project that had met the new structural design criteria, but it had been unable to identify any project that met the same criteria established for the Springfield courthouse. It thus concluded that it could not determine if further courthouse projects would incur similar costs. In addressing doors and windows, it pointed out that there were issues as to the exterior curtain wall system being restrictive due to a single source of certain system components. As such, that specification did not allow for similar systems, and thus prevented competition. Heery commented that the design was created under federal blast criteria and concluded the criteria did cause significant cost impacts. Finally Heery cited as additional factors, the geothermal requirement, the staging involving the trees, and LEED requirements.

88. In its letter, Heery also discussed in detail its tentative design cost estimate. It stated its cost estimate was developed during the months of April and May 2002 and consisted of take offs, system analysis, and confirmation of unit prices of various building systems. Heery stated that the tentative design phase is similar to the traditional American Institute of Architects (AIA) design development phase. At that point, the documents consisted of 345 architectural and seventeen structural drawings. There were also another eighty-five assorted drawings. From an architectural and structural point of view, the project scope was delineated in plans and elevations; however, there were few details explaining the complexity of the structure or of the architecture at that point. The MEP drawing also was not particularly detailed. A 10% contingency was included at that stage for items that had not been included or anticipated in the design documents.

89. Heery then reviewed its role as to the 50% and 95% CCS cost estimates. In summarizing both, it stated:

> Significant variation in pricing from the cost estimate might be associated with incorrect quantity take offs or variation in the anticipated systems performance from that ultimately specified in the final construction documents. The complexity of the project could have been under-estimated by CCS in their cost assumptions, especially in the areas of progressive collapse and blast criteria. Also, the final

> interpretation of the unique design criteria by vendors and subcontractors could have had a much larger impact than anticipated for a number of reasons or could have been misinterpreted and resulted in a much higher cost for a system than intended.

Heery stated that its cost estimating scope of work during the contract design phase was limited to reviewing the estimates prepared by CCS. It stated that a review of a cost estimate addresses items within the cost estimate, such as unit prices, items missing or misinterpreted, and computational errors.

90. Mr. Malinder attributed the high concrete costs to MSA's decision to design a curvilinear concrete building. He said that because of the curvilinear nature of the building, none of the concrete forms used in the initial design's cast-in-place concrete system would be reusable; all would be custom made. He stated that due to the scale of the building, there was actually down time when an idle contractor would have to wait for concrete to cure, prior to adding more weight to it. He testified that the cost of concrete form work is primarily driven by labor, not material, and that MSA's election to incorporate the trees into the design further increased costs of construction. He stated that the presence of the trees required multiple relocations of cranes. He also attributed the high bids to other design features, such as quality of finishes inside the courthouse and a curtain wall, which he said was not a program requirement. MSA did not present substantive evidence contradicting Mr. Malinder's testimony as to the impact on costs due to accommodating the shape of the building. MSA did argue that to the extent the shape and trees contributed to the added cost, GSA had equal responsibility, as GSA approved them as program requirements. MSA also identified a number of items which were independent of the items noted by Mr. Malinder, such as the hardened structure, which MSA asserted contributed to the overall bid bust and specifically to concrete costs.

91. MSA has asserted that the unfavorable bids were outside its control. It has cited as support many of the factors identified in Heery's report, particularly Heery's conclusion that there was exponential added cost from security and blast resistance criteria. MSA also cites LEED, geothermal, and other GSA-imposed criteria as cost drivers. As to elements of the design such as the curved glass curtain wall and retention of historic trees, MSA stressed that GSA wanted that design and approved it through all stages. MSA contended that GSA acted as more than simply a rubber stamp, citing a number of instances where GSA directed certain features. MSA also stressed that Heery reviewed the various MSA estimates and Heery uniformly concurred. MSA emphasized that GSA had more than three years to express concerns as to the project being over-designed, which MSA says GSA did not. Specific items such as the trees and building configuration were wanted by GSA. MSA further contended that the $45 million allotted was not adequate to meet the GSA criteria,

and pointed to the fact that the ultimate construction contract was for $53 million. In its brief, MSA states it was preposterous that MSA could have designed either a $35 or $45 million building, given the criteria it had to include. However, the fact remains that MSA did not indicate to GSA prior to the bid bust that construction bids were in jeopardy of not coming in within budget. Rather, MSA confirmed that the design would yield a building within the cost target.

92. In partial response, GSA cited the requirements of the Design Within Funding Limitations clause, and specifically the fact that the clause provides for redesign where construction cannot be done due to excessive price. GSA highlighted another portion of the LOC clause, which calls for notifying GSA during the design if the cost cannot be achieved. GSA points out that despite various estimates, MSA continued, during the original design phase, to assure that the building could be constructed within the target, with the construction target number varying between $43 and $45 million.

93. In a fax to Mr. Ian Parr of CCS dated November 11, 2003, Mr. Honn commented upon issues he had with the cost estimate that had been provided to MSA from CCS. He identified problems with what he described as the most basic categories, such as resilient flooring or acoustical tile, and asked why entire assemblies delineated on the 90% contract documents, such as roof carpentry, were completely missing from the estimate. MSA, however, also placed some of the blame on Heery. In a March 2004 letter to Heery, regarding a Heery request for payment, MSA criticized Heery as not filling the role on the project to give local market place knowledge and cost and constructability advice, and said the cost overruns related to Heery's poor knowledge of the local marketplace.

94. Mr. Menzies testified that the twenty million dollar budget bust was unsalvageable. He stated that GSA could have rebid the design if the overrun had been three million. After assessing the situation, GSA, in the fall of 2003, decided that MSA should be directed to proceed with a redesign effort, at no cost to GSA. GSA initially set the target for redesign at $48 million.

95. To effectuate the redesign and expedite the start of construction, GSA implemented several decisions. One was to convert the construction project delivery method from a sealed bid to a negotiated construction management format. Toward that end it entered into a construction manager contract (CMC) with Daniel O'Conner and Sons (DOC), which had been a bidder on the original design. DOC's first task was to provide GSA with a feasibility study of possible cost savings, which it did on December 23, 2003, showing construction costs of $50 million. Although it was clear in late December and into early 2004, that the project would have to be redesigned so as to meet budget, GSA was nevertheless holding MSA to retaining the exterior design, including the curved form, curtain

wall, and historic trees. As far as GSA was concerned, any redesign had to include those items. Mr. Menzies explained in his testimony that the exterior could not change because if it did, it would have had to be submitted to a national committee for design review and GSA could not accept the delay.

96. While the parties were staking out positions as to redesign, several other matters were proceeding concurrently. On November 26, 2003, well after the bid bust and soon after GSA entered into the construction manager contract with DOC, the parties formalized a bilateral agreement, under PCO 6, as to payment by GSA to MSA for some of the added work that had been performed during the design phase. Although the modification was valued at $700,000, the figure to be paid MSA was actually less. The modification was composed of a direct payment of $450,000 to MSA, the deletion of services worth $200,000 (with no request for return of money for the deleted services), and a reduction of $50,000 (identified as a "CMC service credit") that GSA took as a credit for work ultimately provided through GSA. Thus, MSA netted $650,000. The modification covered the following items: special survey and rent area calculation, added landscape design/historic trees, additional city meetings/presentations, added commissioning/sustainable, tenant upgrade design based on reimbursable work authorizations (RWAs), revised mail room security design, HVAC special security design, Marshals Service program and space revisions, GSA basement program/design changes, additional geothermal, extended CM service, and Telephone/Data/Audio Video – all non-court offices. The largest dollar item was the revised design to incorporate the elimination of a conventional boiler and chiller system and proceed with a geothermal system. The modification did not address blast or LEED matters.

97. The $50,000 reduction was justified by GSA as the added cost of having to bring on DOC as a construction manager after the design bust. When questioned about the overall adequacy of compensation for PCO 6, Mr. Mathison stated that it did not compensate MSA for all the added work MSA performed or for the added time and man-hours it spent as a result of the items covered. Also, MSA took the position that the decision as to the CMC contractor was imposed on it and it should recoup the $50,000.

98. In late November 2003, as part of the redesign effort, Weidlinger sent a report to Mr. Saviano. The objective was to find cost savings. Weidlinger proposed reducing costs of construction by selectively limiting the extent of protection incorporated into the facility. The primary suggestions called for waiving the glass fails first requirements, waiving blast resistant glazing for windows and enclosed transient spaces, and waiving through better screening items associated with underground parking threats.

99. In a November 13, 2003, e-mail message from Mr. Honn to Mr. Mathison, Mr. Honn addressed modification of the mullions in relation to the glass and glazing and

addressed concerns as to substituting hurricane windows for the windows required by GSA, GSA was requiring windows to meet both blast and ballistic requirements and was not amenable at that time to MSA's requests for substitution. No standard product was available that met the GSA requirements as to the windows. This added to the design effort and to the ultimate cost to build. In his message, Mr. Honn also addressed the structure/concrete and said:

> It is obvious to us that DOC is expecting a change to a steel frame regardless of what simplifications, concessions we make on the concrete. Weidlinger is preparing a tonnage total and description of the framing required.

Mr. Honn's statement makes clear that the die was cast as to changing the structure from concrete to steel. GSA had determined that the project could be constructed more inexpensively with steel. GSA recognized that a change to steel would entail a major redesign on the part of MSA. Also in November 2003, GSA had already determined that it would abandon the geothermal system and return to a conventional system.

100. In December 2003, GSA directed MSA to prepare several concepts that rethought the building in order to incorporate the cost reductions suggested by DOC. In January 2004, MSA provided two schemes. One eliminated the chambers building, and the other kept the outside otherwise intact, but moved the mechanical equipment to the roof.

101. Although MSA was working collaboratively with DOC and GSA, it was not volunteering to redesign at its costs. It took the position that GSA caused the problem by adding criteria, particularly as to blast and LEED enhancements. In a letter of February 16, 2004, to Mr. Menzies, Mr. Mathison addressed both additional work that had been required of MSA (for which it had not been compensated) and the bid bust. He stated that MSA was shocked at the pricing of concrete in the bids and pointed out that MSA had selected a well-respected construction management firm working in Springfield to advise them as to constructability and marketplace issues. Mr. Mathison identified several potential causes for the unfavorable bids, including the Government's new criteria for blast protection, use of metric measure (noting that CMC was asking for a change to the English system), site selection, concrete prices, requirement for geothermal energy, and aspects of the site not being clear. MSA put an estimated price of $1.1 million on the task of redesigning the building so as to meet the cost proposed.

102. Mr. Mathison also addressed delays in completing the design, blaming GSA for untimely action on submissions, making changes to criteria, problems in satisfying the Marshals Service (due to changes in personnel and leadership), and various guideline

interpretations. He acknowledged that MSA was compensated for a portion of the changes, but stated it was not compensated for the time and effort to resolve the differences or due to disruptions caused the project as a whole. After commenting that the government review process was unusually time consuming, he stated, "Now that we have been involved with other GSA projects, we appreciate even more sharply the unusual complexity and time consumed in bringing closure to many issues compared to other cases."

103. In an e-mail message of February 5, 2004, Mr. Moravec summarized a meeting he held with the GSA Administrator and congressional officials as to the courthouse. He stated that he was committed to the curvilinear form, colonnade, chambers building, grand staircase, historic trees, and pavillion. He said these elements were sacrosanct. He was looking at a $50.8 million cost estimate for the project at that point.

104. The most dramatic change directed in the redesign was the requirement that MSA change the building frame from cast-in-place concrete to structural steel. On March 9, 2004, MSA provided GSA its anticipated costs for redesigning, based on the new requirements: $469,071 for MSA; $225,000 for Weidlinger; and $275,000 for Cosentini. MSA also listed miscellaneous consultants at $95,000 and expenses at $35,000. Mr. Leber provided in a letter of February 19, 2004, addressing the MEP number and said that his figure was based on an assumption that the basic layouts, including ceiling plans and receptacle layouts, would not be changed. He assumed that, given the structural renovations, the clear space in the ceiling cavity would remain such that re-coordination of all of the floors would not be required. On February 19, 2004, Weidlinger had sent a letter to MSA costing the scope of the redesign and noting that a complete redesign of the structure to a steel frame (from concrete) would be equal to its original design efforts. It identified $175,000 in anticipated costs, as well as an additional $50,000 for a blast study. Thereafter, MSA was ordered by GSA to proceed with implementing the redesign.

105. As the redesign proceeded, MSA continued to identify changes to the requirements. Mr. Saviano acknowledged that MSA was entitled to some compensation due to changes made during the original design, as well as for some changes involving work during the redesign. He specifically noted that MSA should be compensated for going back to a conventional heating system in lieu of the earlier geothermal choice of GSA.

106. According to MSA, and not challenged by GSA, MSA wanted to explore using some of the concrete structure in lieu of the change to total steel. GSA, however, was unwilling to do that, initially because it thought steel would be less expensive. However, even after GSA knew that the price of steel had spiked dramatically, GSA was unwilling to entertain a combination. GSA viewed a change to steel as a potential means of securing

additional funding from Congress, while staying with concrete would not. In a March 17, 2004, e-mail message, Mr. Malinder stated,

> We are now embarking on redesigning the structural system from concrete to steel for Springfield Courthouse. Obviously, we will not benefit to the extent anticipated by this major design change because of rising steel prices. At some point all "savings" may be lost and concrete will be the same cost, only we can't afford it. If run away costs of steel may be rebated in some form by congress, we need to stay with the steel design. Switching back to concrete will lock in a cost beyond reach.

107. Concurrent with moving forward on the redesign, MSA continued to pursue payment for extra work. On March 30, 2004, MSA submitted a change order proposal to GSA. Portions of that proposal ultimately became part of proposed modification PCO 7, a modification that was never consummated. In its letter, MSA broke out the extra costs into three time categories: Category 1, pre-bid period; Category 2, post-bid period; and Category 3, anticipated claims during the redesign phase. The submission is summarized below:

Design Phase, Category 1:

1-1	Reducing no. courtrooms, schedule disrupt	Combined w/ 1-5
1-2	Program change to USMS space	$ 35,000
1-3	Revisions basement and custodial after 50% design completed	$ 37,000
1-4	Prep and delivery of 75% documents at request of court	$ 28,000 $ 15,000
1-5	Schedule disruption	$187,000
1-6	Additional peer review	$ 60,000
1-7	Added time to secure site	$ 4,000

1-8	Design criteria change as to site and blast consideration of site	$ 45,000
		$411,000

The above totaled $411,000 for Category 1. All of the above are for the original design**.**

Redesign Phase, Category 2:

2-1	Prepare documents for use by CMC and GSA to develop additional cost estimates	$ 35,000
2-2	To verify quantity takeoffs of submitted subcontractor bids	$ 16,000
2-3	Construction cost adjustment budget increase $41.6 to $48 M	$384,000
2-4	Project delivery/schedule change assist GSA in converting the project delivery method from GC lump sum to CMC	$ 32,000
		$467,000

Redesign Phase (not yet done), Category 3:

3-1 to 3-3	All involve project delivery including coordination of site activities, modifying contract award method, and added meetings with city and neighbors	$8000, $2000, and $4000
3-4	For reducing the allotted time for production of revised contract documents by one month	$128,000

3-5	Schedule change to reflect status of construction 9/20/04 and effect of escalation	no # but refers to 2-3
3-6	Geothermal HVAC system, delete and substitute conventional cooling tower boiler system and revise basement	$195,000
3-7	For adjusting documents for imperial measurements	$ 12,000
3-8	GSA blast criteria was not definitive and was untested in marketplace. The criteria and thus the design will need to be modified to meet the intent but keep the ensuing cost reasonable	$ 36,000
3-9	Revision to access flooring	$ 16,000
3-10 to 3-12	For elevator amendment, finishes for courtroom and chambers and review of glazing and security changes	$2000, $4000, and $2000
		$409,000

At the close of the letter, MSA provided, under Notes, "At cost; markups and profit not included. For computation of claim amounts, assumes an average hourly billable rate of $100/hr."

108. On April 8, 2004, Mr. Saviano provided notes reflecting his review of the submission. He found that item 1-1, the reduction of courtrooms, had already been compensated. He found no entitlement for items 1-2 to 1-8, with the exception of printing (item 1-4), for which he found partial entitlement (in a later June 23 update, Mr. Saviano priced this item at $20,000). As to the category 2 items, he allotted for 2-1, $30,000; for 2-2, $12,500; and for 2-3, $250,000. As to category 3, he found zero for 3-2, 3-3 and 3-7 through 3-12. He adjusted 3-1 to $8000; 3-4 to $95,000; 3-6 to $150,000, and 3-7 to $10,000. At 3-5 he placed a question mark. Item 2-3 was described by Mr. Saviano as "Construction cost adjustment. Construction budget increase from 41.6 M to 48M." MSA's dollar claim for

this item of $384,000 was based upon it applying a 6% factor against the $6.4 million difference between $41.6 M and $48 M. Mr. Saviano's estimate of $250,000 for item 2-3 was not explained.

109. Thereafter, on April 15, 2004, Mr. Saviano prepared another summary as to claim items. On this he listed GSA initial numbers, GSA bottom line, and MSA revision. The figures were:

	GSA Init	GSA bott	MSA revised
1-5	150K	125K	187K
1-6	45	30	60
1-8	40	30	45
2-1	27.5	20	35
2-2	12	10	16
3-1	8	5	4
3-4	115	95	128
3-6	170	125	195
3-7	11	7.5	12
3-8	30	25	36

Some items, such as 2-3, were dropped from the new calculation. If we total the columns, the totals are: GSA Initial $608,500; GSA bottom line $472,500; and MSA revised $718,000. The document had a handwritten figure of $800,000 on the side, but with no explanation. The document was not shared with MSA at the time.

110. A May 24, 2004, memorandum by Mr. Saviano summarized a meeting where eighteen value engineering items GSA was planning to incorporate into the revised design were addressed. Some were adopted and some rejected.

111. On May 28, 2004, Mr. Menzies addressed Mr. Mathison's request of March 30, 2004, for compensation due to changes. Using Mr. Mathison's item designations, Mr. Menzies grouped them into the following designations: Category 1, justifiable change orders considered for negotiation with supporting documentation, 2-2, 3-1, 3-4, 3-6, and 3-7; and Category 2, potentially allowable with proper and complete supporting documentation, 1-5, 1-6, 1-8, 3-8, and 3-9. Mr. Menzies disallowed the remaining items put forth by Mr. Mathison, 1-1, 1-2, 1-3, 2-3, 2-4, 3-2, 3-3, 3-5, 3-11, and 3-12. Item 1-4 was not addressed.

112. Mr. Mathison responded on June 2, 2004, and, following Mr. Menzies' categories, provided proposed costs along with backup. He restricted his response to the items that Mr. Menzies listed as either justified or potentially justified.

Category 1

2-2	Takeoff comparison with A/E takeoffs	$ 16,003.98
3-1	City of Springfield contributing for site work	$ 20,006.66
3-4	Accelerated delivery schedule for contract documents	$128,027.98
3-6	AE reverting back to conventional from geo	$267,712
3-7	Changing from metric	$ 24,475

Category 2

1-4	Addition of 75% package	$ 43,257.50
1-5	Schedule lengthening	$187,558.71
1-6	Additional peer reviews	$ 60,094.84
1-8	Original prospectus document re site	$ 44,762.28
3-8	Work with bidders as to finding products to meet blast	$ 36,030.48
3-9	Deletion of added access flooring	$ 41,388.24

113. On June 30, 2004, Mr. Leber sent a memorandum to Mr. Honn addressing memoranda that Mr. Saviano had written on May 24, 2004, and June 15, 2004. Mr. Leber sent his memorandum to ensure that there would be no confusion as to which of the value engineering items would be incorporated into the design documents.

114. Mr. Menzies and MSA continued to discuss the equitable adjustment items. On July 7, 2004, Mr. Menzies wrote that items 2-2, 3-1, 3-4, 3-6, and 3-7 had sufficient merit to warrant further negotiation to determine a fair number. He advised that items 1-4, 1-5, 1-6, 1-8, 3-8, and 3-9 had been determined to have a range between no consideration and potential for partial justification. Items 3-8 and 3-9 dealt respectively with helping bidders as to blast requirements and with the access floor. He said that item 1-4 would only cover

printing. He limited tenant review delays (1-5) to post-95% design completion delays. Then, in what appears to be an internal contradiction, he stated that the additional peer review item (1-6) was untimely and would not be considered. Finally, he said that additional site effort as to security related changes would only be based upon timely revisions.

115. In the fall of 2004, although MSA was working on the redesign, issues still remained as to the final parameters of the redesign, as to what GSA was requiring MSA to retain and what MSA could modify to lower costs. As part of the process, GSA was reacting to demands of the court as to what it would allow MSA to do. In a memorandum dated September 15, 2004, sent to Project Security Team, Mr. Saviano was still seeking permission to alter the Level C requirements needed for the project. He referenced the GSA Security design criteria publication dated January 17, 1997, and its effort to provide a safe environment within cost parameters established by GSA. Toward that end he said he was attaching a memorandum from the team's blast consultant dated November 17, 2003, and stated that the memorandum summarized security issues and outlined items for which the team was seeking the approval of waivers. It primarily included modifications to windows, skylights, curtain walls, and glazing. Finally, Mr. Saviano received approval to drop some of the requirements. By letter of October 5, 2004, he informed Mr. Mathison that MSA was to proceed with the revised strategy. Much of that strategy had been proposed by MSA through its November 2003 consultant report. Thus, almost a year had gone by. Mr. Saviano added that MSA was to provide security calculations when GSA obtained the related system's technical performance criteria from the selected window wall manufacturer, and that the project security blast engineer was to participate in a follow-on meeting with the project security team. The approval finally allowed for use of extreme hurricane criteria for aluminum windows and skylights in both transient and occupied spaces and allowed waivers to the curtain wall. Once the approval was given, the project had almost no windows that opened, almost all punched windows were fixed, and Level C compliance was relaxed.

116. As of September 2004, there was still no agreement as to the appropriate compensation for extra work. In a memorandum dated September 22, 2004, Mr. Saviano provided Mr. Menzies with a summary and recommendations for MSA's request number seven for additional money. He stated that on June 2, 2004, MSA had asked for $1.28 million based on twenty-four line item categories of additional work, which MSA claimed were the result of GSA actions and added criteria that had not been fully defined in the original contract documents. Mr. Saviano specifically called for paying MSA for accelerating the redesign process by a month to counter an acceleration of the construction schedule. The acceleration was intended to allow GSA to award a contract in the current calendar year, which both GSA and its CM determined would result in considerable cost savings. As to the twenty-four items, Mr. Saviano described the GSA strategy to eliminate any line item that related to redesign work required by the contract and which was not a result

of GSA criteria changes and acceleration. He stated that as a result of an initial review, GSA recognized six of the twenty-four items as compensable and GSA would consider four more that were designated as questionable. GSA's overall estimate for the six items was about $400,000, compared to MSA's $800,000. Mr. Saviano finally set out a negotiation strategy to accept only the six recognized items, reject the four questionable items, and then set a maximum target of $500,000, contingent on a full release for all other items claimed. In closing, he said that MSA had accepted an offer of $497,000 for all of the twenty-four requested items and was agreeing to a release. That, in fact, was not the case, as MSA did not agree and no modification was ever consummated.

117. Starting in April 2004, and running into July 2005, Mr. Saviano produced periodic estimates as to the various claimed MSA items. The estimates are in the record, but were not amplified by any testimony. They simply assign numbers to identified items of work (using Mr. Menzies' identification numbers as set out in his June 2004 letter). In his estimates, Mr. Saviano was consistent with the value placed on some items, but not others. There was no explanation as to the reason for changes between estimates. Among the estimates provided are figures for five items identified by Mr. Menzies as payable: items 2-2, 3-1, 3-4, 3-6, and 3-7. In addition, Mr. Saviano provided estimates for five of the six items identified in his September 22 memorandum as justifying further discussions. Those six items were 1-4, 1-5, 1-6, 1-8, 3-8, and 3-9. The May, June, and July estimate sheets include a GSA price for each of these items except 1-6 (additional peer review). We list here the numbers provided in Mr. Saviano's June 2004 list of estimates. First, as to the Menzies items, Mr. Saviano provided, for 2-2, $12,000; for 3-1, $20,000, for 3-4, $115,000; for 3-6, $185,000; and for 3-7, $15,000. In addition, Mr. Saviano provided the following: 1-4, $20,000; 1-5, $115,000; 1-8, $40,000; and 3-8, $35,000; 3-9, $40,000. Neither the June 2004 estimate or either of the other two had a number for 1-6. However, in April 2004, Mr. Saviano had placed a value on 1-6 of between $45,000 and $30,000. Of the above, only items 1-4, 1-5, 1-6, and 1-8 relate to the design phase. Putting aside item 1-6, they total $175,000. The remaining items (categories 2 and 3 above) cover work during the redesign phase and total $422,000. In the latter figure are two major changes during the redesign. One of the changes, 3-4, involves changes to scheduling (acceleration). The other, 3-6, involves changing from geothermal back to conventional heating.

118. On November 1, 2004, GSA sent MSA a proposed modification, which included a two-page addendum that listed all of the items that had been claimed by MSA (many of which GSA had denied as negotiations proceeded). The modification stated that as a condition of settlement, MSA was to sign a release which agreed that the settlement covered all claimed items. MSA did not sign the proposed modification, as it was not willing to release many items that it thought were compensable. On January 21, 2005, Mr. Safdie wrote to Mr. Moravec, addressing the issues to that point. Particularly germane, he stated

that the firm was experiencing losses on this project which had more than wiped out all of the accumulated profit for other projects, resulting in its inability to provide bonuses to its staff.

119. In a letter of January 26, 2005, Mr. Saviano provided Mr. Menzies with a rough estimate as to the added design cost involved in changing the concrete structure to structural steel. He estimated $475,000 for redesign, based on a structural steel contract value of $5 million. He then performed a calculation which relied primarily upon application of percentages to set sums. No attempt was made to actually calculate design hours that would be required. Using Mr. Saviano's formula, he allowed 6% of the structural steel contract value ($5 million) for structural design ($300,000), 2.5% contact value for architectural and curtain wall redesign ($125,000), and 1% of the same number for MEP redesign coordination related to structural redesign changes ($50,000).

120. On February 15, 2005, Mr. Moravec re-entered the picture and responded to an MSA letter in which MSA continued to pursue compensation for changed work. Mr. Moravec cited what he said he understood as an agreement for $497,500 of MSA's revised claim of $869,319. He stated that modification PCO 7, along with a settlement release, had been sent to MSA but GSA had received no response. Thereafter, the modification continued to sit in limbo. It was officially canceled in June 2008.

121. Through the beginning of March 2005, DOC had been performing as CM. On March 15, 2005, although GSA knew that the MSA redesign still was not finished, GSA entered into a construction contract with DOC for $53,314,000. MSA was not notified or involved in the award, but it was aware that the DOC contract was issued.

122. While not fully clear, it appears that DOC was aware of the state of the drawings at the time. Even if not, DOC was advised by GSA that it would have leeway to make some decisions and changes in design aspects as the job progressed. DOC availed itself of that right, and the consequence was that at times, as shop drawings would come in to MSA for review, Mr. Orens would see that the DOC drawings showed features different from what MSA had specified. As stated by Mr. Orens, battles would ensue over what was in and what was not in the job. GSA acknowledges that its decision to award when it did involved the risk of increased RFIs from the contractor, but it saw that as an appropriate trade-off for a lower price for the construction and avoiding the impact of further escalation. GSA says that as of March 15, 2005, when it secured the fixed price from DOC, the cost of the project had increased, due to escalation, by $5,275,880 from July 2003 (the original opening of bids) to March 2005. Over the course of construction, GSA and DOC executed change orders which brought the total of the DOC contract to $57,278,525.

123. The building being constructed under the redesign was essentially the same in outward appearance as the original design. While the most dramatic alteration on the redesign was changing the structural components to steel, much of the mechanical equipment was moved from the basement to the roof, floor-to-floor heights were reduced, the geothermal feature was eliminated, the amount of access flooring was reduced, GSA modified the Level C blast resistance criteria in some areas, and much of the LEED criteria was eliminated (although LEED was not formally eliminated until February 27, 2006). The security criteria were modified with respect to air intake placement, as air intakes were removed from the roof (required by PBS 100) and set at grade; major alterations were made as to glazing, with allowance of hurricane level protection for windows (which had been proposed for the original design).

124. The change from concrete to steel and change of floor-to-floor heights had an impact on multiple items, such as ceilings, lighting, piping, and duct work. Steel structures are deeper, so that factor, plus the loss of one foot per floor, caused MSA to essentially lower everything. The piping and ductwork that had been earlier designed did not fit without extensive adjustments. Taking out the geothermal feature also changed piping. Change from blast to hurricane standard was a big item from a cost standpoint. By going to steel from concrete, precast panels now had to be attached to steel columns and steel beams. In the original design, precast was attached to concrete walls. As a consequence, MSA had to add supplemental steel framing. Further, in order for GSA to meet budget goals, significant adjustments and changes to the design were introduced as the redesign work was underway.

125. Once the job was awarded, the focus turned to adding post-contract construction services (PCCS). The services are discussed below in a separate section. DOC proceeded with construction in 2005, and during 2006, it completed excavation, had foundations in place, and installed some structural steel. The construction was substantially finished in July 2008, but Mr. Orens continued to work on the project into September of that year.

126. During construction, MSA continued to seek compensation for changed work due to the blast criteria and other matters. In his letter of July 6, 2007, Mr. Mathison formally advised Mr. Menzies that MSA could not accept the terms of GSA's proposed modification PCO 7. He asked that GSA consider paying MSA for line items specifically identified in an enclosed list. He noted that the items from categories 1 and 2 (which included work performed during both the original design and redesign) totaled $706,596.22 (when excluding item 1-8). He stated that MSA was willing to accept $497,500 and absorb $209,096.22, so as to achieve a resolution as to those items. His letter left open a number of items which GSA had attempted to have MSA release in the modification. The record contains no response from GSA to this letter.

127. Additionally, the letter again addressed MSA's justification for added compensation due to the blast criteria changes. Mr. Mathison said that it took Weidlinger and MSA, working with GSA, more than two years to develop and implement the blast resistance and progressive collapse criteria in the project, with GSA reviewing as matters progressed. After all that effort, the parties concluded (well after bids came in) that hurricane-resistant criteria and materials could effectively satisfy many of the specialized blast resistance systems required by GSA, at substantially reduced costs. He laid out a list of items which were impacted by the blast criteria change, particularly focusing on the windows and glazing system coordination. He again contended that the primary reason bids on the original concrete frame building exceeded the budget was due to the requirements that the building meet the blast resistance and progressive collapse criteria, and how that requirement was exacerbated further by the site selected by GSA.

128. Thereafter, with matters still not resolved, MSA prepared and presented to GSA three REAs, dated June 1, 2008 (for the redesign), September 5, 2008 (for the initial design), and November 26, 2008 (for the PCCS). GSA took no immediate action. As part of its claims, MSA seeks reimbursement for the hours it spent in preparing each of the REAs. MSA claims labor costs before overhead and profit of $17,490.04 for design, $45,274.05 for redesign, and $14,523.42 for PCCS. GSA presented no testimony, documents, or argument challenging the reasonableness of the hours attributed to the REA work or in opposition to the MSA position that the REAs were prepared in furtherance of negotiations. GSA challenges the hourly rates MSA used for the REAs and the overhead rate MSA applied (to be discussed below). At the time the REAs were provided to GSA, the door had not closed on negotiation or settlement. GSA's position on requiring redesign, however, was firmly established.

129. On April 21, 2009, the CO rejected all three REAs. In his letter of rejection, the CO agreed to pay MSA for tree protection ($11,659.86) and protective design analysis ($10,847.90). MSA submitted invoices for the items but GSA did not pay for them. Thereafter, on August 14, 2009, MSA presented its certified claims to GSA for $1,208,870.61 for the design phase, $1,362,581.84 for the redesign, and $461,339.18 for PCCS. The claim letters were generally very detailed and tracked much of the earlier REA submissions for each of the disputed items. The design claim emphasized the change in criteria and its impact. MSA also cited the effect of the size of the site and stand-off distances and how that interacted with the blast criteria. Appellant also emphasized LEED compliance. The redesign claim disclaimed MSA responsibility, pointing to the additions which MSA charged caused the project to outdistance marketplace knowledge. In addition, MSA addressed the direction by GSA that MSA revise the entire building structural system from a cast-in-place concrete system to a steel-framed system. Appellant stated that the GSA

mandate prevented MSA and the structural engineers from exploring potentially viable alternatives, such as deleting all of the vertical cast in place concrete but leaving the horizontal slabs and columns intact. It emphasized that the change to the steel structure system had a significant impact on many other aspects of the design and that it was not until late in the redesign process that GSA relented as to allowing program modifications, accepting them finally as a last resort. The PCCS claim relied on the contention that the dollars sought were for work beyond what had been agreed to in PCO 8. On December 4, 2009, the CO issued a decision denying all three claims. MSA appealed that denial on December 30, 2009.

130. At no time from the date of the bid bust forward is there evidence that GSA indicated to MSA that it would be seeking consequential damages or that it planned to seek escalation damages from MSA. Rather, consequential damages were first raised in conjunction with set-off in GSA's Answer in CBCA 1849. Thereafter, on April 1, 2011, the a CO issued a decision demandeding payment from MSA of $5,275,880, as consequential damages, due to MSA having to redesign the project. In its affirmative claim, GSA essentially contends that MSA breached the Schedule clause of the contract, which caused GSA consequential damages in the form of added construction costs that GSA would not have incurred but for the delay caused by the claimed breach. MSA timely appealed by letter dated April 7, 2011, and the matter was then docketed as CBCA 2386. The latter appeal was then consolidated with CBCA 1849.

Post-Contract Construction Services

131. At the point GSA entered into the construction management contract with DOC in 2004, MSA had a limited obligation as to PCCS. That was a consequence of deletions made through PCO 6, early on in the original contract (unrelated to the design claim). However, with construction on the horizon, GSA recognized it would need the services and took steps to add PCCS back in. The additions were ultimately set out in PCO 8. By the time serious negotiations were completed on PCO 8, GSA had already converted the CM contract with DOC into a construction contract with a fixed price.

132. On February 17, 2005, MSA submitted its initial proposal to GSA for PCCS. MSA identified the proposal as being based on the scope of services outlined under option 3 of the original negotiated contract provided to the A/E (minus deletion of as-built drawings). Option 3, which had originally been designated as PCCS, had been removed under PCO 6. In April and May 2005, Mr. Mathison and Mr. Saviano negotiated the scope of the services. Mr. Mathison said that in his proposal, he had originally included unlimited responses to Requests for Information (RFIs). However, he was told by Mr. Saviano that GSA did not have the money to pay for those services, and he and Mr. Saviano therefore

addressed a more limited approach. He said that at the time he was negotiating, he was aware that the contract documents provided to DOC were not complete, and in negotiating the services, he attempted to restrict the language to protect MSA's interests and limit the scope of work.

133. As part of the process, Mr. Saviano and Mr. Mathison came to an agreement, which was set out in a May 9, 2005, memorandum, authored by Mr. Saviano. A number of items in the memorandum had been crossed out by Mr. Mathison and Mr. Saviano, with the cross-outs agreed upon by them. The document, with the cross-outs, was given to Mr. Menzies, and ultimately portions were incorporated into the PCO 8 document provided to Mr. Mathison for signature. As explained by Mr. Mathison, the parties were attempting to fit the PCCS within GSA's available money and the document between himself and Mr. Saviano was intended to address all PCCS items for which MSA would have to provide services.

134. Mr. Menzies then proceeded to prepare PCO 8. The modification made changes to the earlier Mathison/Saviano agreement. PCO 8 had three components, the modification document itself and two attachments, designated as A and B. The modification document itself does nothing more than identify the parties and provide a place for signature; the substance is set out on attachments A and B. Attachment A, dated June 13, 2005, identified the basic categories of work and listed five items, including review of RFIs and added value engineering (VE) work. Item 1 was priced at $628,000 and designated "Base PCC Services Updated to 2005 includes review of shop drawings, samples, catalog cuts, manuals, and RFI's (Requests for Information)." Item 2 read, "VE Related Construction Phase review, design, and specify (includes all DOC Cmc Contract VE requirements and recommendations)." It was priced at $220,000.

135. At the bottom of Attachment A, GSA inserted the following:

> ADDED ON 6/20/05
> MSA- PCCS scope of Services Revisions of 9 May 2005 Apply Except for Response to Request for Information (RFI's) (Maximum number of RFI's is approximately 300 excluding RFI's resulting from incomplete Contract Documents)

136. Attachment B contained a memorandum dated June 16, 2005, from Mr. Saviano to Mr. Menzies that had not earlier been shared with Mr. Mathison. Mr. Mathison first saw it when he received PCO 8. The fourth paragraph of Attachment B addressed RFIs and provided:

> Response to Requests for Information (RFI's): Respond to Requests for Information issued by the Project Manager [CM] with regard to the clarification of design intent/resolution of conflicts/design errors or omissions, etc. in a timely manner. Approximate number of RFI's is 300 however RFI's pertaining to incomplete contract documents are not included in this measurement as it is the responsibility of the AE to provide correction necessary to complete the contract documents.

This memorandum also included a paragraph addressing value engineering.

137. Upon receiving the proposed modification, Mr. Mathison recognized that the wording added on June 20 to attachment A incorporated the agreements of the May 9 memorandum, with one exception. It excluded the May 9 agreement as to RFIs. The June 20 addition provided language dealing with the treatment of RFIs and identified approximately 300 RFIs as the maximum number of RFIs covered by the modification. The number of RFIs referenced was consistent with the earlier May agreement, but otherwise the wording inserted by GSA negated the agreement on payment and added an exclusion for RFIs which resulted from incomplete documents.

138. Mr. Mathison testified that he did not agree to the GSA changes as to the RFIs. Therefore, in response to GSA's added language, he handwrote on the modification, directly below the GSA added language, the following:

> SEE ATTACHED MAY 9, 2005 REVISION

He then attached a copy of the May 9 revision and initialed each paragraph of it. He did not initial any paragraphs on the June memorandum and then sent the whole package to GSA. He stated his intent was to accept the modification but with the inclusion of the May 9 language as to RFIs. The language as to RFIs in the May 9 memorandum had provided:

> Response to Requests for Information (RFI's): Respond to Requests for Information issued by the Project Manager [CM] with regard to the clarification of design intent/resolution of conflicts/design errors or omissions, etc, in a timely manner a [sic] maximum of 300 RFI's are included in our base fee after that we will bill you on an hourly rate basis (based on rates as provided in the 2630 forms and marked up accordingly.)

139. Due to Mr. Menzies being out ill, Ms. Deborah Fornier, a CO in Mr. Menzies' office, signed the modification. She did so without comment or response to Mr. Mathison's addition.

140. The parties agree that during the PCCS phase, MSA handled approximately 1200 RFIs. There is no breakdown as to how many RFIs were due to incomplete documents and how many were not. MSA appears to have proceeded on the basis that GSA had accepted Mr. Mathison's revision. GSA asserts that it understood that it did not accept his revisions and instead, MSA was to pay for all RFIs that were attributable to the incomplete documents. There are no letters or other written exchanges during performance addressing the respective interpretations. What is established is that during the contract, MSA received RFIs from DOC and responded to them. RFIs were regularly discussed with GSA and DOC officials. Neither MSA nor GSA was keeping a record of which RFIs were associated with incomplete documents and which were not.

141. In addition, GSA has contended that even if it were otherwise liable for the additional RFIs, it should not pay for that work because MSA failed to follow the contract protocol. The protocol called for RFIs to be logged and handled through prolog, a tracking system. As we understand, DOC initiated each RFI and entered it into prolog. Thereafter, MSA was to act upon the request and record the action. However, what happened on the project was that DOC would often submit RFIs through e-mail and telephone. Mr. Orens stated when these came in he attempted to get DOC to follow the system, but DOC did not. He said he did not want to make a big issue, so he treated each of these inquiries as an RFI. Although they were not coming in through prolog, he still needed to give them a designation, explaining that RFIs were entered on drawings as the project went along. The RFIs were entered so that, in the event an issue came in about an area of the building, he knew where to look. He designated these as "unofficial" RFIs and numbered them starting with one. He said the Government was aware of the practice and he had raised it at meetings attended by Mr. Fletcher. Mr. Orens specifically referred to a meeting in January 2006 with GSA where the matter of informal RFIs was discussed, but nothing came of it. He testified that there was no prejudice to GSA as a result of RFIs not going through prolog, as all RFIs came from DOC and GSA was aware from meetings as to how matters were handled. Mr. Fletcher did not contradict Mr. Oren's testimony as to RFIs.

142. The parties agree that of the roughly 1200 RFIs that were addressed, 832 were official (processed through prolog) and 382 unofficial. Neither GSA nor MSA tracked how many of the total RFIs were the result of incomplete contract documents versus those generated for other reasons. Mr. Orens acknowledged that without going back through the RFIs there would be no way to identify how many were due to incomplete drawings.

143. In addition to the dispute over RFIs, MSA also claims added money for expanded value engineering effort. Item 2 of PCO 8 provided, "VE Related Construction Phase review, design, and specify (includes all DOC Cmc Contract VE requirements and recommendations)." The May 9, 2005, memorandum, which was incorporated by the added language, stated as to value engineering,

> Amendment to design documents. Prepare documents to amend the construction solicitation for issuance by the CO. It is not the intention to reissue all the documents we will work through the shop drawing process and provide clarification drawings where we deem necessary based on the schedule of VE values listed in the construction contract.
>
> Participate in value engineering as conducted prior to the initiation of construction and included in the GSA contract documents and perform related VE design work. Evaluate proposals formulated during construction, provide input and amended construction drawings and/or specifications where required and advise the GSA PM/CO as to their viability and potential cost impacts if any.

144. MSA understood its obligation to be to provide VE services of a limited nature, defined by a schedule and by a list of VE values that MSA had developed and negotiated in the preceding months with Mr. Saviano. During performance, MSA learned that GSA and DOC had agreed to additional VE items over and above what MSA had understood. Accordingly, throughout the construction phase, MSA was required to provide VE services for previously undisclosed items. GSA provided no rebuttal either at the hearing or in briefing. In its claim letter, MSA laid out a number of examples where the VE was beyond the PCO 8 agreement. The examples involved VE work as to the atrium curtain wall, changes to the guard booth, problems associated with the carpet vendor, additions to acoustic ceiling beyond initial cost savings, glass guard, security screening stations, changes to painted steel, wheelchair lifts, and landscaping.

145. The PCCS claim had a third element, described by MSA as exceptions. As part of its scope of work, MSA was to review submittals and engage in field visits to advise GSA as to contractor conformance with design documents. On many occasions, the field work directive issued by GSA to the contractor would include instructions that violated the design documents that had been prepared by MSA. MSA was required to analyze these for problems and inform GSA of issues and non-compliance. The GSA field staff and CM often made unnecessary and ill-advised choices that were inconsistent with the design and GSA

standards. This resulted in a continuous series of added investigative efforts. It then became apparent to GSA that relying on meeting information alone was not sufficient, so MSA was tasked with submitting formalized objections which were designated as exceptions. At GSA's request, MSA drafted sixty-five notices of exception, some very lengthy. There were also a dozen or so letters where MSA acknowledged the notice of exception was not as formal. GSA never directed MSA to stop sending these or doing the necessary, associated field work.

146. On November 8, 2005, Mr. Mathison sent an e-mail message to Mr. Menzies in which he addressed the negotiations with Mr. Saviano as to the PCCS work. He stated that when he negotiated the agreement, he understood that MSA would be providing those services based on documents MSA had created with their consultants and understandings MSA had worked through with GSA and the contractor (DOC). He stated that circumstances appeared not to conform to that expectation and it was apparent that GSA had given DOC license to ignore the construction documents in many areas. He stated he found out about it when MSA stumbled onto an agreement that had been made between GSA and DOC. As a consequence, MSA had expended resources on matters only to find that GSA had come to a separate agreement with DOC that was contrary to contract documents. He asked to be paid for time and material from at least that point plus 10%. GSA did not agree.

Audit Issues

147. A GSA audit, dated May 17, 2011, addressed MSA's claims, most significantly the pricing of MSA labor and overhead. Mr. Gooch of GSA conducted that audit and testified on behalf of GSA. Mr. DaGraca, an accountant familiar with MSA's books and records, testified for MSA. There were several other issues addressed in the audit and those are discussed in conjunction with quantum. MSA briefed both the labor and overhead issues in detail. GSA did not.

148. For each claim, MSA accumulated its labor hours and applied a rate to those hours. The rate was based upon the rate of the employee who performed the work. MSA used the same hourly rates that had been used by the parties for purposes of negotiating the contract. There was no formal agreement that GSA would price changes or extra work using negotiated rates. Nonetheless, in practice, the parties used the rates as a multiplier against hours. During performance, there is no record of GSA suggesting the need to use different rates. GSA sought deductions concerning labor rates, and first raised this matter in the audit. Labor rates for much of the work were in the $30 to $40 range per hour, before application of overhead.

149. When he conducted his audit, Mr. Gooch determined that MSA was not entitled to calculate damages based on the labor rates previously used by MSA. He did not generally dispute the hours that MSA attributed to the work, but he did conclude that the labor rates applied by MSA were too high. For purposes of adjusting the claim, he presented two alternative theories regarding payment. Under the first, he asserted that MSA should receive no payment at all for the additional work. Under the second, he adjusted the hourly rate for each claimed employee by a formula to account for the fact that the work had been done by salaried, rather than hourly, employees.

150. The linchpin of both of Mr. Gooch's alternatives was the proposition that the MSA employees who worked the claimed hours were salaried employees and thus paid a set sum for each year's effort. They were paid based on providing 1950 average hours per year and received the same salary, whether they worked more hours or not. During the hearing, the added work was sometimes referred to as overtime. Actually, the added work was additional hours over the base that MSA had expected to work on this contract. Mr. Gooch reasoned that since the employees did not receive additional compensation for the hours claimed, MSA in fact incurred no additional costs. Under cross-examination, Mr. Gooch acknowledged that under that scenario, GSA would be receiving the benefit of those additional hours for free.

151. Although the MSA employees were salaried, MSA as a practice paid bonuses when earnings made that practicable. Here, however, employees who worked the additional hours did not get bonuses during the period of this contract. In fact, Mr. Safdie provided in one of his letters that one of the casualties of the overruns was a lack of bonus payments to his employees. Mr. Gooch acknowledged that if bonuses had been paid, that would have affected his calculations.

152 As an alternative to not paying MSA for any additional hours, Mr. Gooch presented an alternative theory under which MSA was compensated, but at a reduced rate. He characterized that formula as applying a "labor variance." Under this scenario, Mr. Gooch appeared to reason that the standard rate did not represent a fair allocation of MSA's labor costs, and thus if MSA was to be paid for added hours, it should be paid on the basis of a rate which took into account all work (on both government and non-government contracts) over the nine-year period of the contract (2000 through 2008). To get to his result, Mr. Gooch took all the labor costs incurred over the life of the MSA contracts for nine years and then divided that figure by the number of hours recorded for all MSA work during those nine years. That ratio became the benchmark rate over the nine years and was applied as a reduction against appellant's labor claims on this project. The consequence of his calculation was that it reduced MSA's hourly rate by 28%. Prior to the hearing, GSA and appellant

agreed that the 28% variance could not be supported. The parties stipulated that if a rate was to be applied, it should be 17%.

153. Several observations are of importance. Mr. Gooch provided no basis for his election of the entire time period other than it being an average. The variance could have been calculated on a year-to-year basis or on a phase basis. It is undisputed that calculations would have yielded different results if done on a yearly or phased basis. The calculation he made gave the greatest weight to work performed during the PCCS phase, the phase of the project where MSA incurred the least amount of its labor on this contract. Further, Mr. Gooch identified no accounting basis or cost principle which sets the nine-year allocation as being either a preferred or reasonable choice, or would support the use of the variance at all in this application. Finally, the reduction using multiple years is not consistent with the FAR preference for year-to-year calculations.

154. MSA provided testimony and documents that showed that the parties' practice on this contract was to price changes based on the hourly rates that had been used to justify pricing for the original contract amount. It was not until the audit that the use of any variance or adjustment came up. The record is clear that MSA was directed by GSA to submit Form 2630s in support of its various change order proposals and actually did so. Further, all change order requests, including those that were executed and paid, such as PCO 6 and PCO 8, were based upon MSA rates. In those negotiations, no one from GSA suggested that additional hours for salaried employees would not be paid.

155. Finally, MSA has raised a defense of prejudice. It states that due to the fact that GSA never questioned the method of costing, MSA utilized its salaried employees for the added work. It says that if it had known that GSA was going to modify the rates, MSA could have protected itself by limiting its salaried employees to 1950 hours and bringing on other employees to provide the services. That would have made the process less productive, but would have avoided the issue as to variance. GSA acknowledges that if MSA had used other employees, it could have captured its costs.

156. MSA has asserted that if the Board allows use of the variance, then GSA would get work for free. Mr. Mathison testified that MSA sells talent and time. To put numbers to the issue, there were 20,484.55 hours of direct labor for the three claims. A 17% reduction would result in 3,500 hours for which MSA would not be compensated. GSA, in contrast, sees the use of the variance as still compensating MSA for any added work, but at a reduced rate.

157. The auditor also challenged the overhead that MSA claimed on labor for each of its claims. In its claims, MSA applied an overhead rate of [redacted]% to all of the labor hours.

That is the rate that was audited at the start of the contract and the figure used by the parties during the contract as to any agreed-to changes. In his audit of MSA's claim, the auditor adjusted the overhead rate downward to a uniform rate for all labor of [redacted]%. He arrived at that figure by applying a formula over the nine years of the contract. He said he used a nine-year average to even out hills and valleys. To come up with the [redacted]%, he first calculated an overhead for each year, then took the total company-wide labor dollars for each year and added them together. He then took a ratio of the total labor hours on the GSA contract for the same year and calculated a weight to be given the GSA contract. This was then done for each year. He then took each yearly figure (his calculated weight) and multiplied it against the yearly overhead rate for all work. Without going into detail, his formula, by combining nine years, under-weighted years where MSA expended the most dollars on this project and overweighted years the MSA expenditures were the least. So even though MSA had a yearly rate of [redacted]%, in 2002, when it expended considerable labor, and had a rate of [redacted]% for 2008, when it expended less on this project, Mr. Gooch's formula, based on combining all labor over nine years, under-weighted the 2002 result, while over-weighting the 2008 result.

158. In addition to the above, Mr. Gooch also provided an un-weighted calculation of yearly overheads for the company. Overhead was [redacted]% for 2000 ; [redacted]% for 2001; [redacted]% for 2002; and [redacted]% for 2003. During the redesign, overhead was [redacted]% for 2004; [redacted]% for 2005; [redacted]% for 2006, [redacted]% for 2007; and [redacted]% for 2008. MSA explained that the raw rate was lower in 2007 and 2008, because MSA secured a major project in Singapore in late 2005. It is also noteworthy that substantial bonuses were paid starting in 2007, while bonuses were not paid during the design years. While we have a breakdown for overhead, we have no breakdown for how much MSA expended on this project in each year on labor.

159. Although we have no specific yearly breakdown for dollars spent on labor, Mr. Gooch did calculate (without weighing) overhead by phases. He determined rates of [redacted]% for design, [redacted]% for redesign, and [redacted]% for PCCS. As is obvious from the above, since the largest dollar claim for labor was for the design and redesign phases, the use of [redacted]% across the board skews the numbers in favor of GSA. MSA has contended that because Mr. Gooch assigned more weight to 2007 and 2008 than other years, in calculating overhead for the period, he wound up attributing 62% of the weight for calculating overhead to years that represented only 16% of total direct labor dollars in the MSA claims.

160. According to Mr. Gooch, in reaching his rate of [redacted]%, he relied on the principle of consistency. He could cite to no generally accepted accounting principles, particularly for supporting the nine-year average. Mr. DaGraca pointed out that if this contract had been subject to cost accounting standards (CAS), the use of a nine-year weighted calculation would not have been allowed. Further, he pointed out that FAR

31.203(g)(2) says the base period for indirect costs shall be the contractor's fiscal year used for financial reporting and in accord with generally accepted accounting principles. MSA states that it accumulates its costs on a fiscal year basis running from October 1 to September 30.

161. MSA pointed out that just as was the case with the labor rate, during the contract, Form 2630s were submitted to GSA during the project and those showed a [redacted]% overhead rate. Even well into the PCCS, MSA submitted invoices that showed [redacted]%. The invoices were paid without dispute. GSA never challenged the rate. Mr. Mathison testified that even though MSA's overhead rate exceeded [redacted]% for some years, MSA never proposed a different rate, because Mr. Mathison thought that rate had been agreed to.

Discussion

Audit Issues

As noted in our findings, several audit issues cut across all three claims. For purposes of clarity and organization, we deal with the audit matters first, before dealing with the specific claims.

Labor Rates

After careful review of the GSA's position, as articulated by Mr. Gooch, we conclude there is no merit to either denying all payment or adjusting the labor rates. As to denying all payment, GSA contends that it should only pay for dollars actually expended by appellant. Because MSA's employees were salaried and not paid hourly, MSA made no additional payments to its employees for the extra work claimed. GSA's position is that MSA should receive no added compensation no matter how many hours MSA employees worked, absent MSA showing it paid or was contractually obligated to pay employees more than their fixed salary. GSA rejects the proposition that the Government is obligated to pay for value received.

In reviewing the respective positions of the parties, we find no case directly on point. However, we find two cases which are helpful and deal in part with the issue of the payment of salaried employees. Those cases support MSA's position that it should be paid for the value provided and that GSA cannot deny payment simply because work was performed by a salaried employee.

At issue in *Neal & Co. v. United States*, 17 Cl. Ct. 511 (1989), was compensation for the salary of the contractor's project manager for work he performed relating to a tram

wreck. The Government argued that since he was a salaried employee who was under contract to provide all management services required at the contract sites, the company should not get additional compensation for his efforts. The Government reasoned that because he was not paid on an hourly basis, his employer did not incur any additional expense due to his expended effort.

The court disagreed. In reference to evidence that had been provided by the contractor's accountant, the court stated that the accountant:

> convincingly explained that plaintiff [the contractor] is entitled to the management efficiency of Mr. Watts [its project manager] and on this basis, that it did incur extra expense due to Mr. Watt's work on Case 16. It was appellant's accountant's [contractor's accountant's] opinion that consistent with sound accounting principles, every contract task should bear its *pro rata* share. Absent the tram wreck, the plaintiff could have used Mr. Watts in support of other contract efforts, even efforts on other contracts. This option was foreclosed to plaintiff due to the time Mr. Watts was required to devote to the tram wreck.

17 Cl. Ct. at 523. The court allowed payment for Mr. Watts' time in full.

In *GaN Corp.*, ASBCA 57834, 12-2 BCA ¶ 35,103, although the dispute arose around the meaning of the contract's payment clause, the board in its decision did address Government arguments relating to salaried employees. Essentially, the Government argued that to recover costs there has to be evidence of actual payments and that the term "actual payment" under the clause meant that the appellant could only bill the Government when it incurred hourly costs. Therefore, if salaried employees were not paid for working extra hours, appellant could not charge the Government for those hours. The board found that the contract did not specifically prohibit the contractor from collecting its hourly rates for work performed by salaried employees (subject to the ceiling price). Accordingly, and absent such a prohibition, the board allowed payment. *Id.* at 172,372.

In both *Neal* and *GaN* the tribunal recognized the appropriateness of compensating the contractor for work rendered by salaried employees. We find that the basic principle that one pays for value received should apply here. Further, despite Mr. Gooch's pronouncements, GSA has provided us no legal support or accounting authority to find that additional work should be uncompensated.

Moreover, other factual considerations buttress our conclusion that payment is warranted in this case. First, Mr. Mathison testified that had MSA been put on notice of the GSA position, MSA could have assigned other employees to do the extra work, implicitly freeing up the employees on this contract for work on other contracts. Second, Mr. Safdie wrote that while MSA as a practice pays bonuses, it was not able to do so here because of losses on the job. Mr. Gooch in his testimony noted that if bonuses were paid, that would be a proper basis for adjustment.

As for Mr. Gooch's alternative method, adjusting MSA's labor cost rates by use of a variance, we find his method unpersuasive. He has provided no accounting principle for the calculation itself and no basis for using the nine-year period of the contract. He provides no explanation as to why MSA's volume in 2008 should affect the salary rate to be paid an employee in 2001 and 2002. His calculations mix years and skew numbers based on activity unrelated to the contract in issue. It seems like an artificial attempt to find some way to lower MSA's rates. Moreover, at no time during the contract did GSA suggest such a method and there is no evidence that MSA used such a method in its accounting practices. In fact, throughout the contract, in pricing added work, GSA consistently applied the rates MSA had used for initial negotiations.

Our obligation is to determine what is a fair and equitable adjustment based on the evidence presented to us. In this case, the rates used by the parties during the contract to price work reflect appropriate rates for payment.

Overhead Rates

GSA contested the application of a uniform [redacted]% overhead against the labor expended. That figure was audited at the time of the negotiations and served as a basis for contract pricing. Mr. Gooch has asserted, however, that the proper overhead rate should be [redacted]% for each year, rather than the [redacted]% used by the parties throughout the contract. He reaches his number through a complicated formula, and we fail to see the connection between some of his calculations and overhead on this project. We reject application of a uniform [redacted]%.

Although Mr. Gooch argued for a uniform overhead rate, he also calculated a rate for each year of the project. While it is not clear whether the rates he calculated are based on MSA's fiscal year or the calendar year, we find that the rates he calculates for each year appear to be accurate and MSA has provided us no better alternative.

There is a dramatic difference between overhead rates during the design and redesign phases versus the PCCS phase. The overhead rate during the PCCS phase ranged from a

high of [redacted]% to a low of [redacted]%. That is considerably lower than the [redacted]% claimed. The lower overhead was attributed to the fact that MSA picked up a substantial job in 2005, which absorbed a good deal of its overhead costs. To not recognize the lower rate as to PCCS would unjustly compensate MSA during that time period.

For the PCCS phase, Mr. Gooch demonstrated overhead rates of [redacted]% for 2005, [redacted]% for 2006, [redacted]% for 2007, and [redacted]% for 2008. PCCS work started at some point in the middle of 2005 and was winding down through much of 2008. We can safely assume that extra efforts did not occur immediately, as RFI, value engineering, and site work were part of PCO 9, and thus extra work would not have likely started to accumulate until into 2006. Similarly, we recognize that work in 2008 was relatively light. Accordingly, to measure overhead during the PCCS phase, we conclude that using 2006 and 2007 reflects the most accurate numbers. The average for that period is [redacted]%, which is what we apply to PCCS claimed labor. As to the design and redesign phases, we note that the rate was as high as [redacted]% in 2002 and [redacted]% in 2004, and as low as [redacted]% in 2003 and [redacted]% in 2005. These figures justify the use of the [redacted]% that had been used by the parties for work during the design and redesign phases. Accordingly, we use [redacted]% for those claims.

Finally, MSA submitted all three REAs in the second half of 2008. We find it reasonable to conclude that the preparation of the REA's would thus have taken place in that year. We therefore apply the 2008 overhead rate of [redacted]% to each of the REA labor dollar claims.

Design Claim

MSA seeks $1,118,423.59 for the design claim. Federal contracts for design services by their nature are often more elastic and less defined than contracts for many other services or products. Rather than always creating clear, precise, identified requirements, a design contract contemplates a significant measure of give and take between the parties. *See Bryant & Bryant*, ASBCA 27910, 88-3 BCA ¶ 20,923, at 105,746. It is understood that much of the product (the design) which is to be created will evolve. That will be more so at initial stages of the process as the design concept is fleshed out, than later. This evolution typically occurs after the parties have agreed on a design price. Design pricing is expected to take into account reasonable alterations and adjustments, all of which are inherent to the process. *Planned Environmental Design Corp.*, ASBCA 47599, et al., 96-1 BCA ¶ 28,001 (1995).

However, a design contract, like any contract, has limits and includes provisions which define scope and set out requirements which are not expected to change. Although aspects of scope are subject to being adjusted without triggering added compensation, neither the Government nor the A/E is entitled to make unlimited adjustments without expecting that

some of them could result in a change in design costs. At times a directed design alteration immediately converts to a change. However, often it may take considerable time before an alteration ripens into a change or into a claim. Whether a matter becomes subject of a change often turns on whether the parties can find a collaborative solution or not and often turns on timing. What is not permitted is that a party cannot change the contract at will by requiring or dropping out fundamentally identified contract requirements and/or standards and then not pay for added effort, if added effort was required as a result of the changes. In resolving this claim, the Board considers the changes (whether or not fundamental), their impact on the designer's efforts, and whether or not reasonably contemplated as part of the give and take. We must consider the timing and level of effort required, and our assessment of that will largely dictate our final conclusion. *See Taylor & Partners, Inc*, VABCA 4898, 97-1 BCA ¶ 28,970; *Fanning*, *Phillips & Molnar,* VABCA 3856, et al., 96-1 BCA ¶ 28,214; *modified on reconsideration*, 96-2 BCA ¶ 28,427.

MSA charges that GSA added significant new design criteria after award, particularly as to blast and sustainability (LEED), and those greatly complicated MSA's design efforts, transforming MSA's effort from a straightforward design to a research and development project. With the addition of the blast and LEED criteria, this became the first design project for GSA that was combining the two elements on this scale. MSA charges that at the time of negotiations, GSA agreed, as an inducement for pricing, to streamline administration and provide a high level of cooperation. MSA charges that GSA failed to honor that promise. Finally, although the design claim is submitted as a total cost claim, the record shows that during the design phase, GSA added a number of distinct tasks that it acknowledged were compensable to MSA. However, no payment was made for those items, as GSA has offset the potential payments against its counterclaim.

GSA argues that the design criteria that were initially provided to MSA adequately identified the level of blast and LEED criteria which MSA was ultimately required to provide. GSA particularly emphasizes wording in the PDS and the contract itself. While GSA acknowledges that it introduced a number of documents and guides after pricing was completed, it says that the introduced documents only reiterated what the earlier documents had already required, albeit in different words. Throughout its presentation, GSA emphasizes a broad reading of "give and take." GSA defends its management of the project and asserts that it never made any promises as to streamlining or added cooperation. It blames MSA's costs on MSA's poor administration and unfamiliarity with federal projects. Alternatively, it argues that even if work was added, MSA failed to timely notify GSA of that fact,so MSA should not be compensated.

We have provided extensive findings of fact. We find that the evidence set out in those findings leaves no doubt that after the design contract amount was set (MSA's bid

price), GSA directed appellant to comply with significant criteria that had not been part of the negotiated design package. After pricing, GSA introduced the 2000 PBS 100 (progressive collapse change and LEED), added the GSA security guidelines, imposed a security standard of Level C for blast resistance, and required MSA to meet those standards. Despite GSA's contention to the contrary, the original documents were not closely equivalent to the added criteria, did not convey the level of effort required of MSA, and in significant measure, changed and increased the cost of the design effort.

For purposes of this decision, we address blast enhancement and LEED compliance separately. We identify what criteria should have been expected at the time of pricing, and determine whether and to what extent GSA added or changed the criteria so that MSA (and its consultants) incurred compensable additional costs.

Blast Enhancement

Mr. Mathison testified that, when pricing the project, he was familiar with the provisions in the PDS referencing blast and security protection, but understood the provisions to be primarily dealing with perimeter matters and protecting the building from threats such as a bomb in a backpack. He did not expect or read the documents to require that the structure or its features would have to be designed to enhanced blast standards or that virtually the entire concrete structure would have to be hardened. He emphasized that nowhere in the items relied on by GSA to justify the level of protection required were there details identifying a level of blast protection to which the building had to be designed. Mr. Tinsley provided a similar take as to what the contract indicated, stating that the structural contract documents did not convey to him that the building would require blast enhancements, such as hardening or other structural protections. He also emphasized that, in pricing the project, Weidlinger included the progressive collapse considerations of the 96/97 standard identified in the contract documents, rather than the 2000 PBS 100 standards.

GSA acknowledges that it added documents after pricing was completed, but asserts that the information provided to MSA at bid should have alerted MSA to the level of effort required. GSA, however, provided little evidence to support its position, relying almost entirely on those instances in the PDS that referenced blast or protection considerations. But for conclusory testimony from Mr. Fletcher (who was neither an architect or engineer) that the PDS documents conveyed the criteria required, GSA provided virtually no other technical evidence. References in the PDS and contract to blast elements and protection were not extensive, and as such do not, without explanatory details and support, sustain a finding that the documents conveyed the level of building protective enhancements that GSA claims the documents specified. We find that particularly so when we contrast GSA's presentation with that of MSA. MSA provided multiple design professionals who stated that the documents

did not even closely convey what GSA ultimately required. GSA provided no witness with similar qualifications to rebut the MSA testimony. While we can glean from the cited provisions that exterior protection was a GSA concern and an element to be considered by MSA in its design, what GSA provided did not convey the need for the extent of hardening or other blast and collapse considerations required of MSA on this project. Moreover, as explained by Dr. Smilowitz and reflected in the GSA security documents (ultimately provided to MSA), there are multiple levels of protection which can be required. It is up to the owner to specify the level, and it is not unusual or unexpected to apply some levels for certain instances, while using a different level for other applications.

GSA relied heavily on its contention that blast concerns were set out in the Vulnerability Assessment document it contends was provided to and discussed with Mr. Safdie in May 1999. We find that GSA has not established that MSA had the document at that time. Rather, the record shows, through Mr. Honn's testimony, that the document was first revealed to MSA in June 2001. More importantly, even if Mr. Safdie had the document in 1999, it was not complete. It simply contained excerpts from a larger document. The excerpts did not provide the information necessary to establish the level of blast protection or structural enhancements that could be called for. What GSA wanted did not become clear until the meeting with Dr. Smilowitz in June 2001, when the rest of the security criteria were revealed.

We find that the PDS and other information provided to MSA for pricing cannot be construed as equivalent to the criteria imposed by GSA. What GSA required as to blast components, protection, and progressive collapse was fundamentally different from what had been agreed to in pricing the design effort.

LEED and Sustainability

MSA has also established that from the time of award to designing, GSA dramatically changed requirements for green and sustainability standards, and the level of effort for the design. Mr. Mathison acknowledged that green considerations were to be part of the design, but what the contract documents conveyed did not equate to meeting LEED standards and other green considerations that GSA required. For example, the contract indicated ASHRAE as the standard. The LEED standards that were required of MSA introduced a much more inclusive standard. Mr. Leber, whose work was most directly impacted, testified that the LEED requirements introduced an entirely different level of design effort and complexity. He testified that it was not a level that he would have inferred from the contract documents provided to him. Additionally, even Mr. Fletcher testified that LEED was in an evolving stage at the time that GSA directed MSA to include it in the design. Finally, within LEED

there are different levels, and here GSA chose silver, an enhanced level, as the goal. No such goal was specified in the pricing documents.

In defending the claim as to LEED and green compliance, GSA again provided no insights from an architect or engineer or anyone who had bid a design contract. GSA did no more than cite provisions calling for sustainability considerations and asked us to infer from the provisions alone that what it provided to MSA should have alerted MSA to expect the type of effort required. MSA witnesses acknowledged that they understood that GSA wanted green features, energy conservation, and life cycle costing as an integral part of the design and intended to produce that. What MSA did not expect was the level of effort as to LEED that it had to perform. We find that MSA has established a significant change as to the LEED and sustainability effort.

Impact of Changed Criteria

Having concluded that the changes were unexpected and fundamental, we now address whether the added criteria impacted the effort of MSA and its consultants and thereby increased costs. MSA, through each of its engineering and architectural witnesses, chronicled the substantial effort involved in incorporating both the blast and LEED requirements. MSA witnesses testified not only as to the effect of the changes on MSA's architectural work (effect on facade, layout of rooms and windows), but also as to the extensive effort in coordinating LEED and blast concerns with its consultants and with GSA. The Weidlinger witnesses and Mr. Leber similarly described a situation in which the nature of their design efforts changed dramatically, both in volume and complexity. Our findings of fact include many examples, one of the most persistent being issues with window design. These same witnesses provided testimony that much of the extra effort and costs were attributable to the combination of meeting LEED requirements while at the same time achieving the imposed GSA security considerations and new progressive collapse standards. MSA witnesses provided uncontested testimony that this project was the first GSA project which attempted to incorporate the level of blast and security standards with openness and LEED requirements.

In contrast, but for limited testimony from Mr. Menzies, who generally disclaimed knowledge of what was going on at the site during the job, GSA for all intents and purposes left it to MSA to describe what happened on the project during the design and how it impacted MSA's work. In assessing the presentation of evidence by GSA, we cannot ignore the absence of Mr. Saviano. He was the fulcrum upon which the GSA effort relied, and the one GSA official who could have challenged MSA evidence (if challenges were warranted). GSA elected not to call him as a witnesses. As for Mr. Fletcher, we allowed his testimony as to both blast and sustainability, and did so because he provided the information that was

relied on by the CO in the final decision. However, in weighing his testimony we took into account that he was not a designer, an architect, or an engineer, never bid a job as a designer, and his skill set was in construction. We do not suggest that Mr. Fletcher was not a competent construction professional; however, in this case we find his testimony to be unpersuasive. Finally, MSA also charged that GSA promised streamlining and cooperation and did not deliver. We find that MSA proved this point to be true and GSA in fact extensively delayed the original design effort.

As a final matter, before we turn to quantum, GSA asserts that even if MSA shows that GSA changed the contract, MSA should not be paid because MSA failed to comply with the notice requirements of the Changes clause. We find that given the facts in this case, GSA's position is not sustainable. That is because it did not establish prejudice and, more to the point, because the evidence shows that GSA was timely aware of the matters raised by GSA.

The law is clear as to under what circumstances a notice defense will defeat an otherwise valid claim. The requirements of the notice provision are not slavishly applied. Rather, notice is deemed adequate when it can be shown that the other side received sufficient information so that it was made aware of the potential for a claim for compensation**.** A necessary element for denying a contractor's claim due to lack of notice is that the Government bears the burden of showing that it was prejudiced by the failure. *Ace Constructors, Inc. v. United States*, 70 Fed. Cl. 253 (2006); *Walsh/Davis Joint Venture v. General Services Administration*, CBCA 1460, 10-2 BCA ¶ 34,479. In this case we find that MSA has in fact provided adequate notice. We further find that even if we had found otherwise, GSA has failed to establish prejudice.

We recognize that we are dealing with a claim under a design contract. Both parties agree that such entails some give and take and that an A/E contract does not have the same bright lines as changes on a construction or similar contract. Changes often are more subtle and can evolve over time. It is noteworthy that GSA says that the terms of the Changes clause as to notice are particularly important in the context of an A/E contract. It says that is because anticipated give and take may reasonably give rise in the mind of the owner that the A/E's acquiescence to a feature (not explicitly required in a contract) is an agreement to perform. In this argument, GSA seems to indicate that an A/E has a special duty to more adamantly flag potential cost issues, than a contractor on another instrument.

That anticipated give and take, however, has to go both ways. Often and by agreement of the parties, an A/E does not move forward with a demand for compensation until it is clear to it that an item cannot be resolved through give and take. This was reflected in Mr. Mathison's testimony as to the design claim evolving over time. GSA does not

contest that point. In fact, as a result of give and take on an A/E contract, differences often even out. Time often must pass before the parties recognize that a matter must be treated as a change or ultimately a claim. It would be unrealistic not to view notice on an A/E contract with those realities in mind.

Regarding what GSA knew and when, MSA has identified a number of instances where it provided information to GSA that we find establishes sufficient notice. In June 2001, GSA added the criteria as to progressive collapse, LEED, security, and blast protection enhancements. These GSA actions constituted potentially compensable changes under the Changes clause. MSA did not silently sit on its hands, but instead immediately asked for a meeting to discuss this new data. At the meeting, GSA not only affirmed the imposition of the 2000 PBS 100, but also cited the security criteria as the new standard for the project. At that point MSA had not yet completed or submitted its concept design to GSA. That did not occur until some time in September. Nevertheless, Dr. Smilowitz prepared a report after the meeting and in it cited the potential for extra costs if the new criteria had to be implemented. As to LEED, it was not until well into November 2001 that GSA held a meeting where it provided to MSA an initial laundry list of sustainability items not previously identified. GSA later added silver status, an upgrade to the green criteria. With these, GSA was specifically adding criteria that had not been produced at the time of contract negotiations. We find that it is not credible to conclude that GSA was not aware that MSA considered the added matters to potentially involve added payment.

Further, in February 2002, MSA was early in the tentative design stage, not yet at the point of calculations and coordination of trades. According to Mr. Mathison, MSA was just beginning to incorporate the new criteria and was essentially on budget at this point. On February 5, 2002, MSA provided GSA with a proposal in which it identified a number of work items that it believed were being added and/or considered for addition by GSA. MSA not only provided a list of items and potential increased construction costs, but also explicitly stated that there would be added design costs associated with the items. In response, Mr. Saviano directed MSA to no longer provide in its submission additional design cost figures as to extras. Rather, he stated that the design costs would be picked up as a percentage of the additional construction cost, which was how GSA determined its original design estimate. Of course, if the construction budget did not increase, this methodology would not compensate MSA; however, payment would not be foreclosed under the Changes clause. Mr. Saviano's direction was clear: MSA was not to separately price out design increases. MSA therefore did not include design costs in its follow-on submissions. GSA knew that MSA was and would be incurring design costs not priced into the contract.

Some time later, it became evident to GSA and to MSA that Mr. Saviano's approach was not going to be implemented as a means of compensating MSA for work beyond the

design contract requirements. MSA then began more forcefully to pursue matters. By that point, MSA knew that the suggestions it was making to reduce costs and effort were not being implemented and the addition of blast requirements in combination with LEED was causing a noticeable overrun in its design effort.

During both the design and redesign phases of this contract, the parties engaged in extensive discussions and in fact identified a number of items as extra design work. Many of the items were reflected in the correspondence in 2004. At no time did Mr. Saviano raise an issue of notice or lack of knowledge. Neither did Mr. Menzies. The only indication cited by GSA is a note in an e-mail message from Mr. Saviano to Mr. Honn on December 16, 2002, where, in a document soliciting costs from MSA as to extras, Mr. Saviano stated that it had been GSA's understanding that the new standards in the 2000 PBS 100 were less prescriptive and should not add costs. What GSA fails to note, however, is that Mr. Saviano identified the work as "new standard," and then continued that MSA and its consultants may and should indicate if they can identify any added costs based on the updated standards. He expressed no indication of lack of knowledge or any prejudice as to the MSA identification of added work and its desire to be paid. In fact, he sought MSA's input.

Finally, concerning the issue of actual notice, we discount much of the testimony of Mr. Menzies as to what he knew and when. He testified that he did not know that MSA was seeking dollars for added design effort until he received the REA's. That was eight years into the contract, after considerable extras had been identified by MSA in correspondence and after earlier attempts at settlement had fallen apart. It is simply illogical and contrary to common practice that a CO would be as disengaged as portrayed by Mr. Menzies. He has essentially stated that he was a non-participant as to details throughout the design phase. This was a high profile project. Knowledge, appropriately, is imputed to the CO, who should have understood from the submissions and discussions that new requirements were causing MSA to perform work and re-work that was not contemplated under the contract. Clearly, Mr. Saviano was privy to that information.

Even where actual notice is not established, the law is clear that in order to defeat a claim based on failure to notify, there must be a showing prejudice. *Ace Constructors, Inc*. GSA has failed to establish material prejudice, which it can attribute to the alleged late notice, or what it would have done differently. Further, GSA cannot support an argument that if it had notice, it would have allowed MSA to opt out and proceed per the original standards. Instead, evidence shows that on the whole the added items were not negotiable and would have been required, regardless of notice to GSA. The changes in criteria involved fundamental security and environmental enhancements, updated to reflect changing overall GSA construction standards. The changes were part of an evolving national courthouse construction template coming out of Washington. The lack of likely compromise is no better

illustrated than by the fact that even after the design bust, and when GSA was scrambling for dollars, GSA continued to hold MSA to the added Level C, 2000 progressive collapse, and LEED standards. GSA did not relent on segments of those items until well into the redesign, at a point when GSA finally accepted the fact that for the project to be redesigned within the new funding, GSA could not insist on retaining all the added features.

Design Claim Damages

MSA seeks $1,118,423.59 for the design claim. It presents the bulk of the claim on a total cost basis.

As the court stated in *Electronic & Missile Facilities, Inc. v. United States*, 416 F.2d 1345, 1358 (Ct. Cl. 1969):

> The ascertainment of damages, or of an equitable adjustment, is not an exact science, and where responsibility for damages *is* clear, it is not essential that the amount thereof be ascertainable with absolute exactness or mathematical precision: "It is enough if the evidence adduced is sufficient to enable a court or jury to make a fair and reasonable approximation." *Specialty Assembling & Packing Co. v. United States*, 355 F.2d 554, 572, 174 Ct. Cl. 153, 184 (1966); *WRB Corp. v. United States*, 183 Ct. Cl. 409, 425 (1968).

In this appeal, MSA has presented a total cost claim for the design effort. A total cost approach assumes all costs over what was bid and paid are due to the claimed changes. It is not favored as a means of presenting a claim against the Government; however, in appropriate instances, lacking a better choice, it can be used as the basis for reaching an equitable adjustment. *J.D. Hedin Construction Co. v. United States*, 347 F.2d 235, 246-47 (Ct. Cl. 1965); *Servidone Construction Corp. v. United States,* 19 Cl. Ct. 346, 384-86 (1990), *aff'd,* 931 F.2d 860 (Fed. Cir. 1991).

As the court stated in *Dawco Construction Inc. v. United States*, 18 Cl. Ct. 682, 698 (1989), *aff'd in part,* 930 F.2d 872 (Fed. Cir. 1991), "All that is necessary is a reasonable showing of the extra costs. Defendant cannot be permitted to benefit from its wrong to escape liability under the guise of a lack of a perfect measure. See generally *Dale Construction Co. v. United States*, 161 Ct. Cl. 825 (1963)." In *Dawco*, the court had decided quantum on the basis of a jury verdict, a less-favored approach than total cost. The court stated that it was appropriate to apply a jury verdict approach where it was not possible for the plaintiff to prove its actual damages, but sufficient information existed for the court to

arrive at a fair approximation. Similar cases are *Propellex Corp. v. Brownlee*, 342 F.3d 1335 (Fed. Cir. 2003), and *Boyajian v. United States*, 423 F.2d 1231 (Ct. Cl. 1970). In some instances, such as in *Propellex*, a claim will be denied if the evidence shows that the costs could have been segregated. However, the opposite applies where the evidence shows that the costs of the claimed work were so intertwined with costs of the contract work that they could not be reasonably separated. *See, e.g., Servidone.*

Total cost claims seldom proceed without some adjustments, and if the total cost method is to be used, the preferred approach is what has been characterized as the modified total cost method. That takes into account adjustments for errors in bidding and performance, as well as variations in hours due to how one conducts a given project. That is particularly the case on an A/E contract. An A/E contract, by definition, has some elasticity as to scope and performance, and thus some elasticity as to price and costs. In an A/E contract, much can turn on the relationship of the parties and how they approach matters. As Mr. Honn testified, often a project depends not only on the scope, but also on the degree of complexity put into the design and who is involved. It is affected by the work ethic of the parties. One designer might choose or need to put in more time on a matter than would another.

Further, unlike a construction contract where the four corners are fixed, modifications and alterations are expected with an A/E contract. There is no fixed approach, as the design process evolves over the course of performance. Not everything is expected to go as planned. As the work is fleshed out, elements are tweaked, added, and eliminated. That is, of course, true of this design, a design which MSA acknowledges was not necessarily simple. As noted by Mr. Honn, even without the blast and LEED issues, features such as the curved structure, working around existing trees, the curtain wall, meshing the courthouse and chambers buildings, and meeting Marshals Service security standards all presented opportunities for the effort to be more costly and time consuming than MSA anticipated. When we add to that the fact that MSA lacked prior government contract experience (and thus an inherent learning curve, which Mr. Mathison conceded might affect costs) and that in negotiating the changes that were agreed to, MSA may have left some money on the table, we are left with a situation where we must discount the total cost claim to account for non-Government- caused costs. Finally, we take note of Mr. Mathison's comment that MSA learned a lot of lessons on this project. All of the above go into our determination as to quantum.

As a final consideration in assessing the total cost claimed, we take into account that while GSA added significant blast and protection enhancement criteria, MSA appeared not to weigh the effect of the enhancements as heavily as it should have. This was a courthouse and this project began not long after the Oklahoma City bombing. Given that and the fact

the contract documents did contain requirements for ballistic, blast, and other security features (albeit not as much as GSA required), we find that MSA did not sufficiently weigh the degree of protective work that should have been anticipated, when it priced the project. Still, the effort described in the contract documents presented to MSA, when read in context, did not convey the degree of effort that GSA evidently intended and which GSA ultimately required MSA to perform.

As we have identified, our ultimate calculation is based on the modified total cost claim basis. In order to prevail on the modified basis, a claimant needs to establish four elements: (1) the nature of particular losses makes it impossible or highly impractical to determine the damages with a reasonable degree of accuracy, (2) the bid or estimate was realistic, (3) actual costs were reasonable, and (4) the contractor was not responsible for the added expense. *S.W. Electronics & Manufacturing Corp. v. United States*, 655 F.2d 1078,1086 (Ct. Cl. 1981); *WRB Corp. v. United States*, 183 Ct. Cl. 409, 426 (1968).

Starting with the element of impracticality, we find that MSA has established that much of the design work was so intertwined that costs could not be segregated. For example, as MSA described, when a meeting was held, structural and sustainability matters were often discussed, involving both original contract obligations and the new criteria. Neither MSA nor its consultants could accurately cull out how much of the conversation or dialogue involved impacts of original work versus that of the new criteria. As Mr. Orens stated, the systems were all integrated. He could not separate the time he spent designing the windows for blast and the time he spent designing them for LEED or in relation to more ordinary requirements, such as the waterproof facade. Similarly, part of Weidlinger's anticipated costs involved calculations as to the structural members, slab, and other components. The new criteria made the calculations more complicated and time consuming, but one could not cull out how much time to attribute to a larger beam than the one originally intended. For example, the work required calculating far more reinforcing and rebar, but a calculation would still have been made without the added work. Similarly, Mr. Leber had to provide penetrations, but reinforcing and hardness impacted the task, making it more difficult.

Mr. Honn testified that in the initial design phase MSA made what he characterized as a valiant attempt to go back and look at time records, but determined that it was impractical and unreasonable to segregate the time. In its brief, appellant's counsel asks how MSA could have separately costed or allocated specific time spent on items such as original criteria for progressive collapse as opposed to time on added elements. GSA has stated it should have been done, but has not provided any reasonable methodology for doing it.

The record supports MSA's contention that it was not dealing in this design with separable elements, or with costs occurring over separately identifiable time periods. Instead,

the costs were being incurred concurrently with the contract work of the same general category. This was not akin to a situation where the Government directed a contractor to put asphalt on a road that initially had been described in the contract to be gravel or a situation akin to adding an additional mile of paving. In those instances, we have discrete new tasks that can be measured. The situation, here, has similarities to cost issues in *Servidone (*albeit *Servidone* is a differing site condition case), where the amount and location of the excavation remained constant, but the work was made more difficult because of conditions affecting both new and old work. The court implicitly recognized that the costs could not be separated and found that although the contractor could have arbitrarily assigned numbers to new versus old work that was not necessary or appropriate.

We now briefly address the other three elements. While we cannot find MSA's overall bid estimate for the design to be entirely free of error, the price it provided was generally reasonable for the criteria given at the time. The bid reductions made during negotiations reflected the reduced time and collaboration offered by GSA.

GSA's claim that MSA's bid pricing failed to reflect the scope of the design effort is unconvincing. GSA charges that when one compares MSA's original pricing with the contract negotiated price with GSA, it is clear that MSA left significant money on the table. The immediate flaw in GSA's comparison is that GSA compares numbers without giving MSA credit for significant scope deductions made by GSA during negotiations. Further, GSA does not take into account the effect on MSA's price due to the decrease in performance time from 98 to 76 weeks. GSA asserts that MSA's bid estimate was off, but we note that GSA's estimate and the final pricing of MSA were within the same range. As to the reasonableness of MSA's cost of performance, GSA has provided little evidence. The GSA official with knowledge of MSA's efficiency could have been Mr. Saviano, but he did not testify. Accordingly, as to assessing whether costs claimed were due to GSA or to MSA causes, we look to other evidence in the record.

Our role is to reach a fair number as to damages that is as accurate as is possible. The law does not require exactness or mathematical precision. It does call for us to be convinced that the number we allow is reasonably accurate and fair. In deciding how best to calculate the adjustment, we look at the entire record. When we do that, we find that the overrun claimed by MSA for the work during the design phase is overstated and must be reduced. However, before we move on to that matter, we first address items of work, performed during the design phase, which are compensable as changed work and which we find can be discretely priced.

During the spring and early summer of 2004, the parties exchanged correspondence in which they addressed items that MSA was identifying as changed or added work. In

various letters as well as internal estimates, GSA identified several of the items performed during the design phase that it was willing to consider as compensable extras. The parties each put dollar values on various items, but could not come to an agreement on price. They also could not come to a firm agreement as to which items were extras or whether items would only be payable in conjunction with a larger settlement.

While the parties never came to an agreement as to compensable items, we find that at a minimum there were four work items performed during the design phase that constituted extra work. Three, 1-4, 1-5, and 1-8, were identified in Mr. Menzies July 7, 2004 letter and later addressed in a September 22, 2004 memorandum from Mr. Saviano to Mr. Menzies. Item 1-6, while not identified as compensable in July 2004 by Mr. Menzies, had nevertheless been listed earlier as a potentially compensable item and then re-appeared as compensable in Mr. Saviano's correspondence as late as September 2004.

For purposes of applying a dollar figure to each item, we use a GSA cost estimate and not one from MSA. MSA has the burden as to proving dollars. MSA has not provided us with a sufficient reason to take its number rather than that of GSA. For items 1-4, 1-5, and 1-8, we use the updated Saviano estimate of June 23, 2004, which appears to reflect his last substantive review. There he attributed $20,000 to item 1-4, $115,000 to item 1-5, and $40,000 to item 1-8. For item 1-6, we use $37,500. That is the average between the two GSA numbers reflected on Mr. Saviano's April 2004 estimate for item 1-6. The items total $212,500. Each of these figures appears to be a reasonable estimate of MSA's net additional costs to perform.

We now return to the remainder of the total cost claim on design phase work. We earlier rejected the auditor's attempt to reset the labor rates and also concluded that for purposes of the design claim, we will use the [redacted]% overhead rate used by the parties during the design and redesign period of the contract. The only other remaining item before we address the total is the auditor's questioning of $35,971 in labor claimed by Weidlinger. The auditor disallowed the sum based on his conclusion that Weidlinger failed to credit payments made to it against this contract. We find that the evidence shows that the items credited were not attributed to Weidlinger's claim and involved payment for other coded work. As such, it should not be credited. Weidlinger's position was explained by Mr. Tinsley. Mr. Gooch relied entirely on the fact that the items were booked concurrent with the claim work, but he did not review actual dates or the nature of the work upon which he based his disallowance. We therefore use Weidlinger's claim figure of $74,514 (the figure includes an adjustment that Weidlinger did not challenge). We also use $44,826 for Cosentini. MSA claims $880,591 as its total labor cost overrun (which includes overhead and profit).

Using the MSA, Cosentini, and Weidlinger figures, the combined MSA claim for labor (with consultants, including each party's respective overhead) totals $999,931. We add to that number a profit markup (10%) of $11,934 on the consultant costs, which brings the total labor overrun to $1,011,865. We have identified above $212,500 in direct compensation for the work associated with items 1-4, 1-5, 1-6, and 1-8 (items performed during the design phase). We find those items are to be paid separately and therefore, to avoid double counting, we deduct $212,500 from MSA's claimed labor overrun. When we deduct the $212,500 (on the basis it will be separately allowed), we are left with a remaining claimed overrun of $799,365.

As we stated earlier, MSA has not established that all of its overrun costs can be attributed to GSA changes. Rather, there are clearly costs that are not the responsibility of GSA. Accordingly, it would not be proper or fair to require GSA to pay MSA the total difference remaining of $799,365. While we are confident that MSA did incur significant added costs and that GSA is liable for such costs, we need to adjust the recovery to assure that MSA is not paid for work that cannot be laid at the feet of GSA. Items that contribute to our adjustment of MSA's recovery include the elastic nature of design work, the effect of the learning curve, lack of perfect bidding, various performance choices (not solely due to Government direction), inherent inefficiencies, and money left on the table in negotiations as to earlier modifications.

In adjusting the $799,365**,** to account for costs that are not attributable to extra-contractual action of GSA and for costs which appear to be due to MSA actions or inactions in both its performance and pricing, we have considered several approaches. After reviewing the evidence, we have determined that applying a single percentage reduction to the overall remaining overrun best takes into account the fact that not all of the overrun can be attributed to GSA and therefore part of the overrun must be absorbed by MSA. We have determined that the evidence supports reducing the remaining overrun dollars ($799,365) by 40%, which leaves 60% of the remaining overrun dollars, or $479,619, as attributable to GSA actions. The $479,619 with the added items of $212,500 results in an adjustment for added work on the design phase of $692,119. We point out that in arriving at the 60%, we have weighted the percentage for Cosentini and Weidlinger's costs higher than that of MSA. However, we leave allocation of the dollars to MSA and those firms.

In addition to the labor costs, MSA has also claimed REA preparation costs of $46,558.61, which includes overhead at a rate of [redacted]% and profit. Although we find the [redacted]% rate is appropriate for calculating overhead on the design claim, we have found that the rate for work on the REA (the REA submitted in 2008) should be [redacted]%, which is the applicable rate for 2008, when the REA was prepared. The raw labor for the design REA

was $[redacted], which with overhead comes to $32,252. With profit of $3,225, the final REA number is $35,477.

Bill Strong Enterprises, Inc. v. Shannon, 49 F.3d 1541, 1549 (Fed. Cir. 1995), *overruled in part on other grounds*, *Reflectone, Inc. v. Dalton*, 60 F.3d 1572, 1579 (Fed. Cir. 1995) (en banc), provides that contract administration costs, including REA preparation costs, are allowable as long as they are incurred for the "genuine purpose of materially furthering the negotiation process." That is the case even if negotiations ultimately fail and a claim is filed. *See also Tip Top Construction, Inc. v. Donahoe*, 695 F.3d 1276 (Fed. Cir. 2012); *States Roofing Corp.,* ASBCA 55504, 10-1 BCA ¶ 34,360, at 169,688. At the time the REA was submitted, the door, as to settlement of the design claim had not been fully closed as to negotiations and indeed GSA had agreed that some items justified payment. The parties, however, could not agree on total price and coverage, as well as on release language. MSA has asserted that the REAs were presented in furtherance of finding a resolution through negotiation. GSA has presented no contrary evidence. Accordingly, we find under the applicable law, that the REA preparation costs are allowable. We note, however, that we do not read *Bill Strong* to necessarily require that when a party shows that an REA was submitted for purposes of negotiation, the Board must award all of the proven costs associated with that preparation. Instead, the Board can decide that some but not all of a submission was in furtherance of negotiation and allocate less than total costs on that basis. In this case, GSA did not provide evidence to justify such an action by the Board. Therefore, we allow the costs claimed, adjusting for overhead to reflect the MSA rate in 2008.

MSA also has sought $10,000 in legal consulting fees, all in preparation of the REA for design services. The auditor found legal costs to be a component of MSA's overhead costs. MSA has provided no evidence that convinces us that the auditor is wrong. Thus, the $10,000 is denied. *See States Roofing,*10-1 BCA at 169,688.

The final dollars sought under the design claim are for restoration of the CMC credit of $50,000 in PCO 6. MSA says it was punitive and included to account for GSA having to hire DOC as a CM. There is no reason to go into the fairness of the modification. MSA accepted the modification, and it was part of the agreement. MSA has not argued duress, and even if it did, we do not find duress to have been present. The claim for $50,000 is denied.

In summary, MSA is entitled to $212,500 for agreed work items, $479,619 for the modified total cost changes, and $35,477 for REA preparation. The total is $727,596.

Redesign Claim

MSA seeks $1,320,378.49 for the redesign claim. The Design Limitations clause obligated MSA to design a courthouse meeting contract criteria, which could be constructed for $35 million (although informally but effectively modified during performance to between $43 million and $45 million). The clause provided that in the event that bids were received, which exceeded the estimated price, the designer was obligated to provide a redesign and other services as necessary to permit construction award within funding limitations. Those design services were to be performed at no additional cost; however, the designer would be excused if it could show that the unfavorable bids or proposals were the result of conditions beyond its reasonable control. Additionally, paragraph (b) of the clause provided that the designer was to promptly advise the CO if it found that the project being designed would exceed or would likely exceed the funding limitations and it was unable to design a usable facility within those limitations. The clause continued that the CO would review the designer's revised estimate, and if the CO determined that the estimated construction cost set out in the contract was so low that award of a construction contract not in excess of such estimate was improbable, the CO would authorize a change in scope or material to reduce the estimated construction cost to the amount set out in the contract or adjust the estimated construction price.

Early on in the design, the projected construction number targeted by both GSA and MSA changed from $35 to $43 million. This was not done formally, but from virtually the start of design, both parties understood $43 million to be the target. MSA proceeded to design to that figure. During the design phase, MSA did not contend that in order for MSA to continue to proceed with the design, GSA had to formalize the number. Both parties understood that if the project could be constructed in the range of $43 million, then MSA would have met its obligation under the contract. The original target of $35 million essentially became a nullity.

Not only did MSA, by its actions, confirm its agreement to design to $43 and then $45 million, but in a number of instances, as the design progressed, MSA represented to GSA and provided GSA with assurances that such price for construction would be achievable. MSA made those assurances with full recognition of the fact that GSA had made significant changes to the criteria, with the greatest impact being the new blast and LEED compliance requirements.

During the design process MSA did not sufficiently alert GSA to the fact that it could not modify or produce a design that would allow successful construction bids in the range of $43 million. Further, and despite being advised by GSA as to GSA concerns about the design meeting the construction price, MSA assured GSA that it would meet the construction

target. GSA did not stop the design process and continued to pay on the basis that it would receive the promised product.

Bids came in at around $63 million, well over the target. After some consideration, GSA invoked the Design Limitations clause remedy, which required MSA to redesign, at its own expense, and provide a construction design that was within budget and met the funds available. MSA initially resisted, contending that the overrun in bids was the result of various GSA actions. It cited two primary reasons. First, it asserted that GSA was aware that the project was underfunded and that the project could not be designed to the GSA target cost by any designer. Alternatively, MSA claimed that the construction bid overrun was due to bidders incorporating changes imposed by GSA during the design, and those changes directly and dramatically increased the cost of the project. MSA cites as examples the requirements for a blast reinforced concrete frame, blast resistant facade, geothermal system, LEED and mechanical criteria, as well as what it characterized as program requirements such as the curved shape of the structure and retention of the trees. There is no question that GSA made substantial additions and alterations to the design criteria. Those changes not only substantially affected the cost of MSA's design efforts, but clearly increased the amount bidders ultimately offered to construct the project. That said, neither GSA's changes to the design nor under-funding can excuse the obligation to redesign. MSA continued its design work, confirmed that the design would meet the target, and did not (as the project moved to completion) alert GSA that the design features would likely result in a building priced beyond the budget. A contractor-designer cannot reasonably rely on Government predictions of cost to construct a building not yet designed, particularly where the contact obligates the designer to notify the Government if the design cannot be accomplished within budget. *Planned Environmental Design Corp*., ASBCA 47599 et al, 96-1 BCA ¶ 28,001, at 138,847 (1995); *Acres American, Inc.*, ASBCA 27743, 85-1 BCA ¶ 17,865, at 89,437.

The purpose of having a provision such as the Design Limitations clause is to ensure that an owner has not paid for a design that is unusable (per its budget). Continuing to design a project that the owner could not afford is waste. Logically and fairly, the owner should not have to pay, particularly when the designer is the party with the expertise and is expected to be in the best position to determine what can and cannot go into the project within the stated budget. The validation of the stated budget is one of the objectives in contracting with an A/E firm. *Planned Environmental*.

The clause, however, recognizes that while the designer is responsible for assuring that the design it offers meets the construction budget target, there are situations that could excuse non-performance. Toward that end, the clause provides that redesign will not be required where the overrun is due to conditions beyond the A/E's reasonable control. The

redesign claim presented by MSA turns on the application of the phrase, "beyond reasonable control."

"Beyond reasonable control" is not defined in the Design Limitations clause or anywhere else in the design contract. However, the regulation calling for its incorporation in the contract does provide some limited guidance. FAR 36.609-1, Design within Funding Limitations, provides two examples of what would be beyond a firm's reasonable control: (1) an increase in material costs which could not have been anticipated, and (2) an undue delay by the Government in issuing a construction solicitation. We do not find these two examples to be exclusive and thus similar circumstances would apply.

In both examples, an A/E would have neither triggered nor contributed to the design costs not meeting the target number. With that in mind, we find that "beyond reasonable control" speaks to a situation in which an outside event or circumstance is a trigger that the A/E could not have altered or reasonably expected. Putting it in the specific context of this design sequence, we find the critical question to be whether there were actions that MSA (or its consultant, CCS) took or should have taken that would have revealed that the design could not be constructed with the funds available. Or, instead, do we have a situation where the costs can be attributed to something unexpected or beyond the ken of MSA? We find that the situation was not comparable to a strike, a sudden spike in material costs, or a sudden drying up of labor due to another unanticipated project, but was a consequence of increased costs that should have been picked up in an estimate. When we apply the standard for "beyond reasonable control," we find that MSA's failure to provide a design within the cost available is not excusable under the clause.

Central to our conclusion is that it was MSA's responsibility to provide periodic estimates as to the potential construction costs. The purpose of that obligation was to ensure that the design was within the dollar target and provide warning, where that target was in jeopardy, to allow for modifying the design. There is no dispute that MSA secured construction estimates from CCS; however, what is equally clear is that the estimates proved to be substantially inaccurate. Based on the inaccurate estimates, neither MSA nor GSA moved to change the design and instead proceeded down the path that led to the bid bust. Had the estimates been reasonably accurate, decisions as to proceeding with the design could have been made well before bids were solicited.

Absent a convincing explanation excusing the estimates, MSA cannot establish that the failure to perform was beyond its control. We are particularly mindful that MSA did not produce any witness from its estimator, CCS, at the hearing. Therefore, we lack a credible explanation as to why CCS did not know that the project design could not be constructed within budget. We do know that CCS's estimate did not reflect the bids that were received;

CCS's estimates (based on a letter from Mr. Honn) had other serious deficiencies; and there was virtually no evidence (even second hand) presented as to what, if any, steps CCS took to test the marketplace. MSA did not establish that CCS understood the complexity and nuances of the design, nor show how CCS came up with its estimate. We have ample evidence as to much of what was missed, where the estimate and reality differed, and why bidders set their pricing as they did. However, we have no evidence adequately explaining why CCS did not anticipate the bid bust and why it should not have. Finally, MSA presented no evidence of an eleventh hour spike in concrete costs or a sudden drying up of local concrete contractors, just before bid time. Absent such evidence, we cannot find that the bid bust was due to conditions beyond MSA's reasonable control.

In making our decision, we have taken into account MSA's arguments as to the failure by Heery and GSA to question the CCS estimates and have considered MSA's argument that the GSA and Heery concurrences amounts to confirmation of the reasonableness of CCS's action. We disagree. Neither GSA nor Heery had primary responsibility as to estimating. Their role was to take and then check data provided by CCS, such as quantities and other general estimating items. They did not have the primary responsibility to go to the marketplace and test the waters. It was MSA's obligation to accurately estimate its design and to account for changes or enhancements. MSA failed to do that adequately and, therefore, must bear the consequences.

As MSA presented a total cost claim for the redesign and we determine that MSA was liable, we need not address audit adjustments. Normally, we would stop here and move on to the PCCS claim. However, two issues remain that we need to address: agreed changes during the redesign and change from concrete to steel.

During the period of March into July 2004, GSA and MSA exchanged correspondence as to various work items that MSA claimed were extras and for which it sought to be compensated. In his letter of July 7, 2004, Mr. Menzies conceded that items 2-2, 3-1, 3-4, 3-6, and 3-7 were payable. Thereafter, in his September 22, 2004, memorandum dealing with settling out work items that GSA had added to the project, Mr. Saviano identified six items (that GSA was prepared to negotiate) beyond the five items noted above. Two of the six items identified by Mr. Saviano, items, 3-8 and 3-9, involved work performed during the redesign phase. Accordingly, between Mr. Menzies and Mr. Saviano, items 2-2, 3-1, 3-4, 3-6, 3-7, 3-8, and 3-9 were designated for negotiation and payment. That work was added during redesign does not change the fact that, to the extent it is new work and not required for the redesign, it is compensable. In contrast, redesign efforts to effect the cost savings necessary for compliance with cost limitations are not compensable. *See Planned Environmental; Anlauf Ingenieur-Consulting*, ASBCA 37361, 90-1 BCA ¶ 22,352 (1989).

The record shows that items 2-2, 3-1, 3-4, 3-6, 3-7, 3-8, and 3-9 were identified by GSA as justifying some payment. The latter two items are reflected in Mr. Saviano's September 2004 memorandum. The parties, however, never agreed as to the cost to be put on the items. That said, we do have cost estimates from both parties, including estimates prepared by Mr. Saviano in May, June, and July 2004. As stated in our quantum discussion on the design claim, MSA has the burden of establishing its costs for the added work items. With that in mind, we have examined the evidence and find the most accurate reflection of costs to be the June 2004 estimate of Mr. Saviano, which reflects the GSA numbers at that time. Using Mr. Saviano's estimate of June 2004, as set out in our Finding 117, the total for the seven items is $422,000. A major item in this total is the additional cost for designing a conventional HVAC system, to replace the geothermal system that GSA had earlier added.

In addition to the items identified above, there were a number of other work items performed during the redesign that MSA has identified as added work and for which it has sought payment. GSA disagrees. Those items were not specifically addressed at the hearing or in briefing, and as such, we have no basis to conclude that they are compensable. Further, MSA carries the burden of proving its entitlement and the costs. We conclude that MSA has provided insufficient evidence, on the record before us, to find entitlement for the additional contested items.

There is one final item to consider. That is the change of the structural framing from concrete to steel. As a consequence of MSA's obligation to redesign, the A/E was responsible for making reasonable changes in the design which were necessary, so as to transform the failed design into one within the budget. Accordingly, in a number of areas, MSA has to absorb the costs of reasonable design changes. However, even though MSA was obligated to redesign, MSA had the right, within reasonable parameters, to use its judgment in making adjustments to meet budget. While the owner, GSA, had the right to insist that as much of the original design as practicable be retained and that the overall design not be compromised, the designer, must have some ability to exercise its judgment in prioritizing elements to be retained, as long as the target price could be met. As with a number of aspects of a design contract, there is not necessarily a bright line defining the limits of GSA's rights. The line is one that needs to be assessed on a specific fact basis.

In this case, we find that GSA's unwillingness to allow MSA to salvage aspects of the original concrete structure (and go instead to an entire steel frame design), caused MSA to perform added design efforts that were not fully required as a remedy for the over-budget design bust. The record shows that the impetus for GSA making the change was initially its belief that a steel-framed building would be cheaper to build (because GSA could avoid what it saw as escalation issues relating to concrete pricing and labor). Had that remained the case, MSA would not be entitled to any relief. However, evidence shows that GSA knew

almost at the start of actual redesign (the time GSA gave MSA the go-ahead) that the material savings as to concrete were unlikely to be as anticipated. By early 2004, before MSA was committed to the steel design, and at a point that it could have salvaged segments of the earlier framing, it had become clear to GSA that steel prices also were spiking. Nevertheless, GSA held MSA to the change. GSA's decision was in part motivated by the belief that if there were to be additional overruns, changing the structural framing to steel might free up more money from Congress.

While we find the above, we also recognize that GSA's concerns about concrete versus steel involved not only material costs but also costs of labor. One of the conclusions drawn from the reviews after the bid bust was that the cost of concrete labor was a major element of the bid bust, particularly where forming was impacted by trees and by the curved nature of portions of the structure. Accordingly, while we question GSA's actions in denying MSA a chance to salvage portions of its design, we do not question GSA's overall right to have made the basic change as to structure. It is with that background that we determine what is reasonable to compensate MSA for this item.

Since MSA was not permitted to salvage part of its design, we have no hard benchmark against which to measure its damages. While there is no hard benchmark we can nevertheless fashion compensation based upon a jury verdict. To do that we must first have a reasonable belief that damages are warranted and then have some reasonable basis and numbers from which to fashion the remedy. We conclude that we have here sufficient information to arrive at a jury verdict for this item.

As to costs, the record contains Mr. Saviano's letter of January 26, 2005. There he provided Mr. Menzies with an estimate of what he expected it would cost MSA, Weidlinger, and Cosentini if GSA required a steel frame in lieu of the concrete frame that had been the basis of the original design. He estimated the costs to MSA, Weidlinger, and Cosentini to be in the range of $475,000. The record also contains a letter from Mr. Mathison to GSA dated March 9, 2004, where Mr. Mathison estimated the cost of redesigning the building at $1.1 million (our understanding is that number was for the total building and not solely for the frame). In addition, Weidlinger provided a supporting quote where it equated the effort in changing to a steel frame to a total redesign. Weidlinger costed its work at $225,000.

Taking into account the above, we find that Mr. Saviano's estimate of $475,000 appears to be a fair number to place as the estimated added costs to MSA and its consultants in going to a steel structure. We find that MSA has not given us a better number.

Having established a cost basis, the remaining issue is to allocate what portion of that sum represents costs that could have been avoided if MSA had been permitted to salvage part

of its prior framing design. We find that a fair adjustment would be to apply to Mr. Saviano's estimate a factor of 25%. That percentage reflects our sense of the percentage of the building that was not curved or in a location where forming would not have been impeded. Using the concrete frame may well have been cost effective in those areas. Accordingly, we find entitlement at $118,750.

MSA also claims $45,274 in direct labor for preparation of the REA submissions for the redesign. While MSA has provided evidence that the REA was in furtherance of negotiations, and GSA made no direct challenge at the hearing or in briefing, we cannot ignore the fact that the redesign REA primarily focuses on challenging the GSA decision to invoke GSA's rights under the Design Limitations clause and justifying compensation on the basis of GSA error. We find that the record shows that by the time of MSA's submission of the REA, GSA had taken the position that requiring MSA to redesign at MSA's cost was no longer a matter of negotiation. GSA's position on that matter was firm. Other work items on the redesign however were not fully foreclosed. Accordingly, we find that only some of the cost associated with the redesign REA should be compensated. Based on the record and the REA filing, we find that 25% of the labor claimed for preparation of the redesign REA is compensable.

Therefore, in calculating REA compensation, we allow 25% of MSA's claimed labor costs for the REA preparation and apply to that the overhead rate of [redacted]% rather than the [redacted]% used by MSA. We use [redacted]% because that figure reflects the overhead rate for 2008, the time of the REA preparation. Our total for compensation, with profit, is $22,958.

MSA also seeks $92,145 (broken down as $80,000 and $12,145.47) for legal consultants incurred in preparing the REA proposal for the redesign. The auditor challenged these costs on the same basis as legal costs were challenged on the design claim. We agree with the auditor and deny relief.

MSA is therefore entitled to $422,000 for work added, $118,750 for the change to steel framing, and $22,958 for REA preparation. The total due is $563,708.

PCCS Claim

MSA's third claim is for $460,431.23 for additional PCCS services. The claim covers several work activities that were performed during the construction phase of the contract. The original contract had called for MSA to provide PCCS services, but as a cost-cutting matter the services were essentially eliminated through PCO 6 in November 2003. However, once the project reached the construction stage, GSA needed to add the services back in. Toward that end, Mr. Mathison and Mr. Saviano negotiated the scope of a modification.

During negotiations, Mr. Mathison took into account the fact that the DOC contract (the construction contract to be serviced by the added work) had been awarded on the basis of incomplete documents. Mr. Mathison knew this would generate more work for MSA and attempted to define MSA's scope of work, so as to cover MSA's expected efforts.

After some initial negotiations, Mr. Mathison and Mr. Saviano reached an understanding that was set out in a May 9, 2005, memorandum addressed to Mr. Menzies. Finding 133. Initially, Mr. Mathison had proposed costing unlimited RFI responses. However, due to GSA cost constraints, the agreement was limited to the costing of approximately 300 RFIs in the modification price, with GSA agreeing to pay for additional RFI's on a predetermined hourly basis.

As best can be determined, there was no further interaction until GSA presented MSA with proposed modification PCO 8. The modification was composed of three pages: a cover page and attachments A and B. Attachment A stated:

> ADDED ON 6/20/05
> MSA- PCCS scope of Services Revisions of 9 May 2005 Apply
> Except for Response to Request for Information (RFI's)
> (Maximum number of RFI's is approximately 300 excluding RFI's
> resulting from incomplete Contract Documents)

As appellant correctly says in its brief, "Even the most generous interpretation for GSA cannot avoid the fact that Modification PCO 8 explicitly incorporates the May 9 memorandum to define MSA's scope of services for everything except for RFI responses." Clearly, the only reasonable reading of the above is that GSA incorporated into PCO 8 the parts of the May 9 memorandum agreed to by Mr. Mathison and Mr. Saviano, excepting the May 9 provisions as to RFIs.

Mr. Mathison, in reacting to the modification, inartfully wrote under the added GSA wording of 6/20/05, the following, "SEE ATTACHED MAY 9, 2005 REVISIONS." Mr. Mathison testified that he intended to cancel out the exclusion as to the RFIs, and to incorporate what had earlier been set out in the May 9 memorandum as to that work. He then attached a copy of the May 9 agreement, as modified by Mr. Saviano and himself (with each paragraph initialed), and sent it and the rest of the material to GSA. He made no notation on attachment B, the June memorandum. After receiving the material from Mr. Mathison, a GSA contracting officer signed the agreement and returned it to him. Ms. Fornier, rather than Mr. Menzies, signed for GSA, because Mr. Menzies was out of the office. GSA provided no comment in its return, and no witness from GSA testified as to how they

understood Mr. Mathison's notation or the status of the agreement. GSA never called Ms. Fornier or Mr. Saviano to testify concerning the modification.

Each party has a different understanding as to what was finally agreed to by the signed modification. MSA asserts that Mr. Mathison's notation incorporated and resurrected the RFI language from May 9. GSA contends that the May 9 RFI language was not incorporated. Additionally, GSA argues that the language added by the CO to attachment A not only served to obligate GSA to pay for only 300 RFIs, but also bound MSA to handle, for free, any RFIs that arose as a consequence of incomplete documents.

Under its interpretation, GSA has defined incomplete documents to be those contract drawings or specifications that had been prepared by MSA, but at the time of the GSA award to DOC had not yet been completed. GSA says that while it recognized that entering into the DOC contract when it did would adversely affect MSA as to RFIs, MSA should actually have been grateful to GSA, as the purpose was to avoid possible added escalation which GSA would have passed on to MSA.

We find neither party's reading to be reasonable. Instead, we find that the agreement simply settled the fate of approximately 300 RFIs. There is no question that the money in the modification covers those. As to RFIs in excess of 300, the parties had no agreement or any basis on which to infer an agreement. Accordingly, what is before us is whether or not GSA is obligated to pay MSA for the approximately 832 RFIs for which MSA has provided services, but has not been compensated. The record does not establish that MSA was obligated to perform all of the work for free, or for the price in the modification.

GSA raises two additional defenses. It argues that even if the modification did not bar payment (assuming we find the work was not agreed to be free), MSA should not be paid because many of the RFIs were due to incomplete documents, and that was a consequence of MSA having failed to provide biddable documents at the time promised. GSA explains that in order to mitigate future damages, GSA had a right to issue the incomplete contract to DOC when it did. That it created more RFIs is not a consequence for which it should have to pay. Second, GSA says the claim should be denied because appellant did not run all RFIs through prolog**,** a tracking system on the contract.

As we stated in the discussion on redesign, the Design Limitations clause gives GSA the right to order the A/E to redesign in appropriate circumstances. With that comes an inherent right to insist that the redesign meet its needs, even if that means the designer will have to perform substantial reworking. On the flip side, while the designer must meet the owner's needs, the designer is entitled to limit that work to alterations and changes needed to get the project to a biddable number. The designer cannot be held to perform for free,

work that is added to the project and which is unnecessary to the accomplishment of the promised design. While directing work to cover mitigation may be permissible in certain circumstances, in all circumstances a party must act reasonably in securing that mitigation.

The bid bust on this project occurred in August 2003. MSA was not given a go-ahead by GSA to proceed on the redesign (because GSA was still deciding what it wanted) until March 2004. To the extent there was ultimately a time urgency, GSA clearly contributed. In addition, once design resumed, key design issues, such as hurricane windows and transient space, were not resolved by GSA until well later in the project, delaying the point when MSA could provide a fully finished product. Finally, the record made clear that had MSA been warned or advised of GSA's intention to contract with DOC on the basis of incomplete documents, MSA could have taken steps to further accelerate the document effort. GSA did not justify the necessity of contracting with DOC before the documents were completed. Under these facts, we find it unreasonable to hold MSA responsible for the consequences of DOC working with incomplete documents.

GSA also has claimed that MSA should not be paid because it did not use the prolog system for RFIs as was otherwise required. The record established that all RFIs were initiated by DOC and it was DOC that initially was to submit the RFI into the prolog system. MSA attempted to have DOC proceed in that manner, but notwithstanding that effort, DOC often submitted RFI matters via e-mail or phone. When MSA was unable to get DOC to comply, it set up a parallel tracking system for non-prolog RFIs. GSA was aware of DOC's actions and MSA's parallel system. GSA raised no objections during the project. Moreover, neither the auditor nor GSA has challenged the hours attributed to the RFI's, whether listed in prolog or in the informal system. GSA has shown no material prejudice to it by the dual system. Accordingly, the prolog issue is not a basis to deny entitlement to additional compensation for responding to the RFIs.

MSA has also sought compensation for having to perform additional value engineering services beyond what was covered in the modification and to perform services which MSA has designated as exceptions. MSA understood its value engineering obligation to be limited by a schedule of VE values in a list it had developed and negotiated in the proceeding months with GSA. As Mr. Orens testified, the value engineering costs MSA seeks were for work beyond that scope. GSA provided no rebuttal to the entitlement and the auditor has not questioned the hours.

MSA seeks compensation for what it characterizes as exceptions. As part of its services, MSA was required to review submittals and to engage in field visits to advise DOC as to DOC's conformance with contract documents. MSA was required to analyze these submissions for problems and inform GSA of issues of non-compliance. The expected scope

was included in the modification dollars. However, due to DOC having incomplete drawings and due to GSA giving DOC the go-ahead to make changes where DOC felt it was warranted, MSA repeatedly was dealing with changes that either were wrong or in conflict with the MSA drawings or their intent. Those then had to be reconciled, and to do that, MSA created the exceptions which it submitted to GSA for action. We earlier determined that GSA had no contractual right to hold MSA to the consequences of GSA's decision to issue incomplete documents. Our reasoning here is essentially the same. GSA has presented no defense or rebuttal on the claim for exceptions and the auditor has not questioned the hours.

In addition to the three categories of PCCS services, addressed above, MSA also claims costs for additional work directed by GSA as to signage, the atrium, and the file room. MSA provided testimony from Mr. Orens that identified the work and established that both MSA and its various consultants incurred the claimed costs. GSA has not rebutted MSA evidence that the work was performed, nor has it asserted that in its briefing. Rather, GSA challenges these items through the auditor's disallowance. The bulk of the disallowance, however, is based on either applying the rejected variance to labor hours or denying costs for work because the auditor had concluded that it was performed after the contract was completed. The auditor set February 1, 2008, as a cut-off date for any payment. That was despite the fact that various MSA witnesses testified to performing work after February 2008 and in some instances into September 2008. The auditor relied entirely on the dates of the invoices and did no independent check as to when the work was performed. Work, however, was performed as to the signage, atrium, and file room. This was agreed added work for which MSA was not paid. Pricing is addressed below.

MSA also claimed entitlement to costs associated with preparing the REA for the PCCS work. As was the case with the design and redesign claims, GSA provided no challenge at either the hearing or in its briefing.

MSA claimed $460,431.23 for excess cost during the PCCS phase of work. The audit and MSA brief do not entirely track. Nevertheless, the items can be reconciled, and both the audit and appellant's briefing appear to cover the same claim elements. For example, in its brief, MSA appears to combine all labor associated with the PCCS work, including signage and atrium. In contrast, the audit followed the breakout provided in MSA's certified claim, and as such broke out labor for signage and for the atrium work, as well as the consultant costs for each of those work activities. For purposes of this decision, we have chosen to generally track the flow of the audit as we address the PCCS claim.

MSA identifies $[redacted] as costs of direct PCCS labor (for the three primary elements, RFIs, VE work, and exceptions). The audit breaks the figure into two parts, excessive RFI labor of $[redacted] and out of scope PCCS labor of $[redacted]. Although the

auditor disallowed the compensation sought by appellant, the auditor did confirm that the base labor figures accurately represented what appellant had booked for the two items. The only accounting adjustment the auditor made as to these two numbers was a downward adjustment of $11,053 for what the auditor characterized as out-of-scope labor. That audit adjustment, however, was based on applying a 28% variance reduction to labor. We have earlier discussed the matter of the variance and rejected its application. Having determined that GSA is liable for the added RFIs and other PCCS work, we find MSA entitled to the $[redacted] for its overrun in raw labor. Appellant is entitled to overhead on that number; however, as set out in our discussion of the audit, we find [redacted]% to be the appropriate rate and not [redacted]% claimed. MSA is entitled to $216,313 for labor and overhead and $21,631 for profit, for a total of $237,944.

MSA claimed $[redacted] in direct labor for the signage work. In its brief MSA adjusted that number downward to $[redacted], acknowledging that it included some excess hours. MSA also claimed $18,515 for costs it owed to its consultant, Ralph Baressi and Associates. The auditor disallowed MSA's entire labor charges for signage, as well as the claim of Baressi. The denial was based entirely upon the fact that the costs were booked after February 1, 2008. There is no basis for the auditor to have made the cut-off he did, as work continued into September 2008. MSA is therefore entitled to the base labor of $[redacted], which with [redacted]% overhead is $13,967. When we add profit, it comes to $15,364. As to the dollars claimed for Baressi, which were also denied on the basis of date, MSA is entitled to $18,515, plus a 10% profit of $1852 for a total of $20,367. The combined labor and consultant cost award comes to $35,731.

The auditor identified a claim of $[redacted] for labor for the atrium. The auditor concluded that MSA erred in its claim as to hours expended, and found that instead of the project manager and managing partner incurring 215 and twelve hours respectively, the project manager incurred 213.5 hours and managing partner none. In its opening brief, MSA has cited the Board to a chart showing the hours it booked and explained that the managing partner, in fact, booked the hours. We find that credible. MSA, however, agrees that when the calculation is redone (which adds hours for Mr. Mathison and Mr. Honn, but lowers hours for Mr. Orens), MSA did overstate the claim by $61.05. We therefore allow $[redacted] for direct labor, which takes into account the deduction shown by MSA. With [redacted]% overhead and 10% profit, the entitlement is $21,492.

The consultant costs for the atrium work included $7500 for Cosentini and $40,500 for Rolf Jensen. We find the disallowance of $1730 for Rolf Jensen is warranted, as MSA has not shown that auditor was incorrect as to what was paid and invoiced. Jensen is thus costed at $38,770, rather than the $40,500 being claimed. As to for Cosentini, the auditor

took no exception. Accordingly, we find MSA entitled to $38,770 for Rolf Jensen, $7500 for Cosentini, and a 10% profit of $4627. MSA receives a total of $50,897.

The claim includes an item for the file room. Neither the labor cost of $338 nor Weidlinger's claim of $4500 is challenged. Accordingly the total of $4838 plus $484 in profit is payable, for a total of $5322.

MSA sought labor costs for preparation of the PCCS REA. . We find it was presented in furtherance of negotiations and the possibility of settlement had not been foreclosed. But for applying the variance, the auditor had no accounting deduction. MSA has acknowledged that its claim is slightly overstated and has adjusted the base labor to $[redacted] from $[redacted]. The new number with overhead of [redacted]% calculates to $28,554. When one adds profit, MSA is due $31,409.

MSA claims $6500 for a legal consultant. The auditor denied that on the basis that those costs were included in how MSA calculated its overhead. We agree with the auditor. MSA has provided no rebuttal and we deny the claim.

In summary, we allow the following for the PCCS claim. Overhead and profit are included:

$237,944	Labor for excess RFIs and out of scope PCCS work
35,731	Labor for signage and Baressi
21,492	Labor for atrium
50,897	Atrium consultants
5,322	File room
31,409	REA preparation
$382,795	Total

Counterclaim/Set-Off

GSA asserts that appellant, by failing to provide a biddable product until March 2005, breached its contract with GSA and is thereby liable for consequential damages incurred by GSA in the form of construction escalation costs. More specifically, GSA frames the matter as a breach of the Schedule clause. GSA is careful to frame the matter not as a failure of MSA to perform its professional responsibilities, but rather as a breach of an independent obligation. This claim has a simple resolution: the contract as managed by GSA did not establish a date by which revised specifications were required, and did not specify liability in the case of a bid bust. Here, MSA's actions did not constitute a breach which would

entitle GSA to consequential damages. The Board addresses some of GSA's concerns as may be useful to parties in the future.

Earlier in this case, MSA filed a motion for summary relief, in which it asked that we dismiss GSA's counterclaim and set-off. MSA made a number of arguments, among which were (1) that the Design Limitations clause was the exclusive remedy available to GSA for any failure associated with designing to price; (2) that if the clause on its face did not establish that it was the exclusive remedy, then application of contract interpretation principles, including how the parties treated the clause, mandated that the Board find the clause to be exclusive; (3) that even if the clause was not specific, consequential damages were not contemplated by the parties; (4) that if the clause was otherwise applicable, GSA failed to provide adequate notice; and (5) that if consequential damages were a permitted remedy, then in order to recover, GSA still must prove that the cause was due to professional negligence on the part of MSA. We denied the motion at *Moshie Safdie & Associates, Inc. v. General Services Administration*, CBCA 1849, et al., 11-2 BCA ¶ 34,851, where we found that the clause was not necessarily exclusive; that under certain circumstances, consequential damages could be available; that matters of how the parties interpreted the contract language and issues of notice implicated factual matters that required further development; and finally, while not deciding the issue, we noted that all other things being in GSA's favor, it appeared to us that GSA would still likely have to prove negligence.

At the hearing, the parties presented facts and arguments as to the meaning of the contract language and expectations. We could choose to address those matters here and define whether MSA or GSA's reading should prevail. However, it is not necessary in this case, because, in the end, assuming we would find in favor of GSA as to meeting the threshold of liability, we still would have to determine whether GSA could perfect its claim through showing non-performance or, instead, whether GSA would need to establish professional negligence on the part of MSA in order for GSA to recover. Accordingly, we choose to move to that issue, for it is dispositive.

The contract at issues is an A/E contract for professional services. The FAR, 48 CFR 36.609-4, requires that the Government include in the contract the clause, Responsibility of Architect/Engineer (APR 1984), FAR 52.236-23. In summary, the clause provides that the contractor is to be responsible for the professional quality, technical accuracy, and coordination of all designs, drawings, specifications, and other services furnished under the contract. The contractor is to be responsible for correcting any errors or deficiencies in the design drawings and specifications with no additional compensation. Government review and approval do not operate as a waiver. It then states, "[T]he Contractor shall be and remain liable to the Government in accordance with applicable law for all damages to the Government caused by the Contractor's negligent performance of the services performed

under this contract." The clause also specifies: " The rights and remedies of the Government provided for under this contract are in addition to any other rights and remedies provided by law." The clause, which generally mirrors practices in the commercial marketplace, defines the scope and limits of damages available to the Government. It limits recovery of general damages, which could include consequential damages, to those caused by negligent performance of the A/E's professional services. Choosing to frame its claim as the breach of an independent obligation does not circumvent the well-established standard that where the claimed breach is due to a failure of the A/E to properly perform its professional skills, then negligence is the standard. *C.H. Guernsey & Co. v. United States*, 65 Fed. Cl. 582 (2005); *Brunson Associates, Inc.,* ASBCA 41201*,* 94-2 BCA ¶ 29,936; *Ralph M. Parsons Co.,* ASBCA 24347, 85-1 BCA ¶ 17,787 (1984). As stated by the court in *Guernsey*,

> In the absence of an express agreement, "an architect, like a physician or lawyer, does not guaranty, imply, or warrant a perfect plan, or favorable or satisfactory results. It follows that an architect's work can be inaccurate or imperfect without being an actionable deviation from the standard of care." 6 C.J.S. *Architects* 16; *see, e.g.* [Philip L. Brunner & Patrick J. O'Connor, Jr.] Bruner & O'Connor [On Construction Law] 17**:**40 at 631 ("Unless they otherwise agree, designers are not required under the common law standard of care to prepare perfect plans and specifications.").

65 Fed. Cl. at 596.

GSA readily acknowledges that claims for consequential damages arising out of breaches of the Responsibility of Architect clause are evaluated under a negligence standard. However, GSA argues that the failure in this case was not a failure to provide professional services, but rather a failure to meet an independent obligation under the Schedule clause, somehow disassociated from application of the A/E's professional skill. GSA lays out its approach as follows. It says that the Schedule clause, out of which the Government claim arises, constitutes a contractual provision to exceed any negligence-oriented timing of delivery requirements. GSA continues that it is well-settled that an A/E and owner may contract to a standard higher than the negligence standard. *See Leo A. Daly Co.*, ENGBCA 4463, 85-1 BCA ¶ 17,740 (1984). GSA then notes that except to the extent otherwise provided in the contract, the negligence standard in the Responsibility for Architect/Engineer clause remains in force with respect to evaluating MSA's skill and diligence. The agency then concludes, however, "MSA agreed to and should be held to objective requirements in excess of the negligence standard of care, as modified by GSA under the Extension of Schedule Submissions Clause, identified in the Schedule Clause."

What GSA appears to say is that MSA can agree to be bound to a lesser standard than negligence, and moreover, MSA in this case has agreed to the lesser standard for any failure to meet the schedule. The Board agrees with GSA that MSA could agree to a lesser standard and could eliminate the need for GSA to show negligence. In point of fact, MSA agreed to do that in part in this contract, first when MSA agreed to the Design Limitations clause remedy and second in the Responsibility of Architect clause itself, where it agreed to correct errors at its own cost. In each instance, MSA explicitly agreed to permit a remedy that did not tie its obligation to negligence. Otherwise, however, proving negligence, as set out in the Responsibility of Architect clause, applies. The fact is that nowhere does MSA agree to be bound under strict liability for damages, much less to be exposed to consequential damages, because it did not meet dates. The law is well established; matters of waiver as to that responsibility must be clear and unequivocal. As stated in *Parsons*, neither the A/E clause in a government contract, nor any other portion of the contract imposes upon the architect strict liability for mistakes, ambiguities or so called "defects" in the specifications the architect prepared. 85 -1 BCA at 88,899.

The fact that GSA has attempted to dress a professional services claim in different clothes does not change the status of the claim. There is no provision of the contract where MSA agreed to be responsible for consequential damages caused by non-negligent errors or omissions in its performance. That is in contrast to its agreement under the contract's Design Limitations clause, to redesign at its costs, if it failed to deliver a biddable product and its agreement under the Responsibility of Architect clause, to correct errors at its costs. Neither of those remedies requires a showing of negligence. However, where the remedy sought is other than what MSA has specifically agreed to, then negligence is a necessary element in order to establish liability. That is what the Responsibility of Architect clause says and that is how we apply it.

GSA cited the Board to a treatise, Kevin Sido, Architect & Engineer Liability, Claims Against Design Professionals (2013), ¶ 5.02, which provides:

> when deadlines must be met, failure to achieve them can result in liability regardless of fault. Damages can be very substantial in the case of schedule violations. Regulatory fines, contractor delay claims, and loss of revenue are just a few of the major kinds of damages that an owner may incur because of a design professional's breach of schedule obligations.

Nothing in the cited sections suggests that schedule violations by an A/E are not subject to the owner having to prove negligence. We do not disagree that if the violation of the contract is due to negligence, then delay damages might be available. We do not address

in this decision when and under what circumstances such damages might be recovered. That will wait for another decision. Here, the contract section cited by GSA does nothing more than identify areas of potential damages to an owner which could be passed on to an A/E. It says nothing as to the legal standard needed to prove liability.

Having concluded that in order for GSA to recover, either on its counterclaim or set off, GSA must show that the escalation damages were the result of negligence, the remainder of our analysis is not particularly complicated. We earlier found that MSA was liable under the Design Limitations clause to redesign. We based our decision in large measure on failures as to the estimate provided to GSA and the fact that the evidence indicated to us that CCS had erred in not taking steps to better verify the difficulties and costs associated with the planned construction. Neither at the hearing nor in documents has GSA established that failures associated with the estimate rose to a level that would qualify as professional negligence. While testimony and documents identified some bad choices and omissions as to the bid bust, the errors were not identified as negligence. Moreover, MSA did present testimony through its witnesses, who were architects, contending that the CCS estimate process was adequate and in line with what was required. In contrast, GSA presented no rebuttal from any architect or engineer. MSA also cited to the GSA and Heery reviews of the estimate, which it claims confirmed that CCS performed properly. As addressed in the redesign claim, we found that MSA did not meet the beyond reasonable control test, and based that largely on our finding of error in the estimating process. Error, however, does not equal professional negligence. For the latter, GSA needed at a minimum to provide an expert whose testimony or documents charged and then established that MSA was professionally negligent in its preparation and delivery of the design, so as to be liable for the consequential delay damages claimed. We find GSA did not establish negligence and accordingly we deny GSA's counterclaim and set off. Accordingly, we grant MSA's appeal as to on this matter.

Unpaid Invoices

The parties have agreed that if the counterclaim and set off are not sustained, then MSA is entitled to payment for unpaid invoices. The parties have agreed in stipulations that MSA is willing to accept $47,389.66 for those invoices. Since we have denied the counterclaim and set-off, we grant the $47,389.66.

Decision

CBCA 1849 is **GRANTED IN PART**. We find that appellant is entitled to $727,596 for the design efforts, $563,708 for redesign costs, and $382,795 for PCCS services. The total is $1,674,099. In addition, the parties had stipulated to payment of $47,389.66 for unpaid invoices. Interest runs from August 9, 2009, the date of the certified claims.

CBCA 2386 is **GRANTED**.

HOWARD A. POLLACK
Board Judge

We concur:

JERI K. SOMERS
Board Judge

JOSEPH A. VERGILIO
Board Judge