

BAY CONSTRUCTION CO.

CONTRACT NO. V662C-1439

**VABCA-5594, 5625-5626
5628, 5831**

**VA MEDICAL CENTER
SAN FRANCISCO, CALIFORNIA**

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OPINION BY CHIEF ADMINISTRATIVE JUDGE McMICHAEL

These timely appeals were taken from a contracting officer's final decision responding to various claims submitted by Bay Construction Co. In those claims, Bay sought equitable adjustments for the "value of work" it provided in the Contract and the supplemental agreements (VABCA-5594 and 5831), and "Government caused delays and suspensions," including additional direct labor costs (VABCA-5625), unabsorbed home office overhead (using the Eichleay formula) (VABCA-5526), and loss of productivity/disruption (VABCA-5528).

The record before the Board consists of the Pleadings; Rule 4 Appeal File (R4), tabs 1 through 42; Rule 4 Supplement (R4 Supp.), tabs 51 through 73; Appellant Exhibits (A-) 1 through 23 (including 3a, 4a, 10a-d), and 26 through 30 (A-24 and 25 were not made part of the record); Government Exhibits (Exhs. G-1 through 9); Board Exhibits (Exhs. B-1 through 14) (consisting of a complete set of the Requests for Payment together with supporting documentation); a

Stipulation of Testimony dated September 28, 2000; the four volume transcript of the hearing in this matter (cited as "Tr. vol. #/pg. #"); Appellant's Opening Brief (App. Br.); Government's Post-hearing Brief (Gov't. Br.); and Appellant's Reply Brief (App. Reply Br.).

FINDINGS OF FACT

Background

On December 20, 1995, the Department of Veterans Affairs (VA or Government) awarded Bay Construction Co. (Bay or Contractor) Contract No. V662C-1439 (Contract), in the amount of \$644,375. The Contract required Bay to furnish all materials, equipment, tools, and labor to perform demolition and general construction for the renovation of the Primary Care Area, Building 200, at the VA Medical Center, San Francisco, California (VAMC). (R4, tab 2) The invitation for bids (IFB) required submission of a base bid and three additive bids. The base bid work required the remodeling of the patient recovery area that is connected to the operating suite. The three additives included the remodeling of: 1) the minor procedure/urology area, 2) the family waiting area, and 3) operating room #1 (referred to as Additive #3). The VA awarded Bay the base bid and all three additives. The base bid was awarded at \$428,397, Additive 1 at, \$78,705, Additive 2 at \$40,404, and Additive 3 at \$96,869. (R4, tab 1; tr. III/8)

Construction of the project was phased “solely for the convenience of the patient recovery staff and the OR [Operating Room] staff” to permit continued recovery room operation. Phasing was also necessary to allow access to the elevator lobby. Phase I required Bay to begin work at the south end of the patient recovery area and the OR, and, once that was complete, move on to the other phases. Each phase was to be completed prior to commencing the next phase. Specification Section 1.06, Project Schedule, Phasing and Time Constraints, of the Contract set forth the four performance phases: Phase I - Recovery Area South and OR #1; Phase II - Recovery Area North; Phase III - Minor Procedures and Urology areas; and, Phase IV - Family-waiting Area. (R4, tab 1; Exh. G-3; tr. III/8-10)

The Contract required Bay to “(a) commence work under this contract within 45 calendar days after the date [it] receives the notice to proceed, (b) prosecute work diligently, and (c) complete the entire work ready for use not later than 270 days after the required commencement of work.” In scheduling its work, Bay was required to perform Phase II immediately following the completion of Phase I. The VA specified that there be 10 working days between phases. At the completion of each phase the Contractor was required to demobilize to allow the Government to move into the completed phase. Bay was also required to submit a detailed schedule “before proceeding with any demolition or new work at least 30 days in advance of need.” (R4, tab 1)

The Contract required Bay to submit its Schedule of Costs within 30 days after date of receipt of the notice to proceed, breaking down and assigning an appropriate portion of the Contract price to Contract work activities. In conjunction with submission of the Schedule of Costs, Bay was also required to submit a progress schedule in the form of a bar graph with the starting date the date the Contractor received the notice to proceed and the ending date the

original contract completion date. The progress schedule and Schedule of Costs were to be used to determine Contract progress payments. (R4, tab 1)

The Contract also required that Bay provide logs detailing its preceding day's work daily and to forward submittals within sufficient time to permit proper consideration and approval action. Submittals were to be timed to assure adequate lead-time for procurement, and "[s]ubmittals for long lead items shall be made as soon as possible [after] award of [the] Contract." The VA CHANGES clause was contained in the Contract, and the SUSPENSION OF WORK clause was incorporated by reference into the Contract. (R4, tab 1; 48 C.F.R § 852.236-88(j) (JUN 1987))

Jerry Prescott was the Contracting Officer (CO) on the project, and Andrew Katanics was the Contracting Officer's Technical Representative (COTR). COTR Katanics worked on the project throughout the Contract, and prior to that he worked on it as the project architect. CO Prescott issued the notice to proceed on January 10, 1996, stating the work was to be completed in 270 days, which was October 6, 1996. A pre-construction meeting was also held on January 10, where Bay and VA went over the "standard checklist" discussing how to proceed and process submittals. (R4, tab 3, tr. II/227, 233-34)

Bay's formal progress schedule and Schedule of Costs submission were due to the VA by February 12, 1996. Noticing a problem getting an accurate schedule and timely submittals from Bay, CO Prescott sent a letter to Bay on February 28 about its failure to provide submittals and noting he was particularly interested in the submittal for the medical gas and vacuum systems. He also mentioned submittals were lacking for the electrical, HVAC, doors and hardware, plumbing fixtures, casework, and plastic wainscot. (Exh. G-6; tr. II/238-41) The first indication of a Bay progress schedule in the record is an unsigned and undated computer report with the heading "Run date 17 January

'96." Among other things, the document gave a Contract completion date of October 5, 1996, depicted the Contractor planning to start work on February 20, 1996, and showed it completing the Phase I work in 66 days. (Exh. G-9)

Bay began its mobilization on the project site on February 20, 1996, but was unable to put its job trailer in place due to the VA's roadwork. Correspondence dated February 21, 1996, from Mark Lee, Bay's project manager and also one of its owners, noted that the Contractor was ready to begin preliminary demolition work, "[h]owever, due to conditions that would prevent us from placing our job trailer in place (roadwork performed by [VA] due to water leakage), we could not resume work as planned . . . [w]e would like to notify your office that Bay Construction plans to charge [VA] for bringing our crew to the jobsite.

COTR Katanics visited the jobsite daily. While there, he inspected the work, saw who was working, and reviewed how the work was progressing. He used the schedule to monitor Bay's performance and stated that the VA had not taken exception to that schedule. When asked about Bay's work progress he noted: "[i]t progressed, but not as quickly as we would have liked, from the beginning. And the very end, near November/December, there seemed to be very few people working. And at certain times, certain days, I didn't see anybody there." He was concerned because he believed the Contractor's schedule was tight from the outset. (R4 Supp., tab 53; tr. II/40, tr. III/5, 18-19, 96; R4 Supp., tab 52; Exh. G-7)

On February 28, 1996, COTR Katanics contacted Mr. Lee to raise concerns about Bay's failure to provide submittals on several items including the medical gas and vacuum and HVAC systems, electrical, doors and hardware, plumbing fixtures, casework and high pressure plastic laminated wainscot. He told Mr. Lee that Bay would not be allowed to work on the medical gas and vacuum systems until all the materials were submitted and approved. Thereafter, the VA

started having weekly meetings with the Contractor to improve communication between the VA and Bay. (R4 Supp., tab 53; Exh. G-6; tr. II/240)

Mr. Lee wrote the COTR on March 13, saying Bay's construction schedule was being delayed due to its discovery of asbestos on the jobsite. On that same day, Mr. Katanics instructed Mr. Lee that when it received written confirmation on the asbestos the VA would tell him how to proceed. Mr. Lee also sent a letter to CO Prescott on April 5:

As we discussed on April 4, 1996 . . . the project [is] being delayed due to road construction and unresolved asbestos technical questions.

I discussed with [COTR] Katanics on April 1 that our construction schedule is being affected . . .

You have asked that we maintain a crew on the jobsite. If we man the job without work being performed DVA will need to reimburse Bay Construction for that time. We feel it would be more cost effective to pull off.

(R4 Supp., tab 56)

Monthly progress payment requests show that Bay was behind schedule from the outset of the project and the VA imposed a 10% retainage for unsatisfactory performance as of the Second Progress Payment. (R4, tabs 1, 52; R4 Supp., tabs 54-55; Exh. B-2)

Finding that Bay was failing to make adequate progress and was delinquent in providing submittals, CO Prescott issued a Cure Notice on April 30, 1996. The Cure Notice cited Bay's failure to provide several submittals (for HVAC, plastic wainscot, floor leveling compound); shop drawings (for HVAC, casework, fire sprinkler); and its delays in promptly notifying the VA of unforeseen conditions. It indicated the VA's concern about Bay's ability to meet

its Phase I completion date, and raised the Contractor's revised schedule showing a Contract completion date of November 26, 1996. Bay responded on May 6, 1996, notifying CO Prescott that it "may pursue possible delay claims," "[d]ue to technical errors, unforeseen conditions, and delays caused by other contractor's work." It advised the VA that it was considering pursuing possible delay claims for extended overhead (Eichleay formula) and unnecessary payroll costs. Mr. Lee wrote the CO on May 13:

[Bay] had planned to start 2/24/96, but due to roadwork in progress, we could not start until 3/2, the following weekend.

We stopped work on 3/12 and started on 3/19, after we learned of the results on 3/18 [of the asbestos testing].

Completion of demolition and continuing on the following work was delayed by a longer than expected approval of our proposal to demolish concrete curb at the former cabinet locations. We notified DVA of these curbs 4/4/96 and submitted a proposal on 4/5 to demolish them. However, it wasn't until 4/18 that we received approval to do the work. This resulted in a disruption of our progress and a two-week delay to our schedule.

(Exh. G-8; R4 Supp., tabs 57-58; tr. II/240-43) CO Prescott testified that following the issuance of the Cure Notice performance improved for a while, but that in June 1997, Bay again started reducing the employees on the jobsite. (Tr. II/242-43)

Mr. Lee also responded to CO Prescott's concerns about the project schedule and the extended completion date in a letter of May 17, 1996. He alleged that certain project issues that he had previously discussed with the CO had contributed to the delay of the project and that "[t]hese are issues where

delay in one area has impacted completion of other items of work, and where the duration of the delay is due to more than physical correction at the jobsite, but also due to evaluation of the problem and response and approval time.” He identified those delay items as the VA roadwork, asbestos in the OR area, approval of the proposal to demolish concrete curbs, installation of stainless steel ductwork in OR #1, electrical questions (RFI [Request for Information] #25), and framing at the north wall of OR #1 (RFI #17). He also represented that there were other jobsite problems that were “causing an indeterminate amount of delay, such as the problem in locating a sink drain line and the need for raising existing ductwork at the North side of the OR.” He also represented that the “[s]equencing of work items must be revised to work around the problem areas and scheduling of crews must be revised.” (R4 Supp., tab 60)

On May 15, 1996, Bay’s attorney, Sidney J. Cohen, Esq., wrote to the VA about several alleged delays and warned that there were “other jobsite problems causing an indeterminate amount of delay.” Around this time, Contract interpretation questions, associated with the submittal of the HVAC control system also began to occur, and Bay informed the VA it was reserving its right to seek an equitable adjustment and an extension of time associated with that matter. After discussions between CO Prescott and Mr. Lee, Bay agreed to submit a claim after the completion of Phase I. (R4 Supp., tabs 59, 61, 62)

Bay’s scheduler and initial project manager for the VA project, Randy Doerr, wrote CO Prescott on July 25, 1996, representing that the Contractor had “reviewed items which we have previously identified as causing delay in our work progress through no fault of our own,” and requested that the Contract time be extended for those items, “which have caused a delay in our progress beyond the time already requested in Change Order Requests.” Excepting delays associated with the HVAC controls, Bay requested an additional 66 days.

Bay used that 66 days to calculate its request for an equitable adjustment for general conditions (\$12,903) and “unabsorbed overhead using the Eichleay formula” (\$25,446). Bay provided further elaboration regarding its claims of Government caused delay, on September 11, 1996. Shortly thereafter, on September 20, 1996, Mr. Doerr wrote CO Prescott citing issues regarding a modular headwall, and ductwork in the OR as “additional project issues which have delayed our progress” increasing the delay period (to 76 days), general conditions costs (to \$14,858), and unabsorbed overhead costs (to \$26,548). Bay requested an additional 40 days of delay associated with changing the nurse call/code blue panel on September 25, 1996. (R4 Supp., tabs 63-66)

The CO testified that he considered defaulting the Contractor, but decided it was in the VA’s “best interest” to allow Bay to continue working. On November 21, 1996, Mr. Lee wrote “[w]e cannot give DVA a new updated construction schedule due to problems concerning change order material lead time and Med-Gas Problems.” (Tr. II/246; R4 Supp., tab 67)

From April 19, 1996 through December 20, 1996, eighteen (18) SAs were negotiated and executed by the parties increasing the Contract amount from \$644,375 to \$740,003, and extending the Contract completion date from October 6, 1996 to January 19, 1997. SA #19 was a Stipulation of Settlement issued on November 19, 1998, to resolve various appeals and outstanding issues not the subject of these appeals, including the unresolved change orders. (R4, tab 7)

SA #1, executed on April 15, 1996, involved the removal of a linen warmer in OR #1, extended the Contract completion date 10 days and increased the Contract amount by \$2,689 to \$652,064. SA #2, executed on April 15, 1996, covered removal of approximately 45 square feet of concrete pads, extended the Contract completion date 3 days and increased the Contract amount by \$3,336 to

\$655,400. Neither of these SAs made reference to releases or to reservation of rights. SA #3, for additional demolition and relocation of a plumbing vent, extended the Contract completion date 1 day and increased the Contract amount by \$2,830 to \$658,230. SA #4, addressed the removal of asbestos containing tile and mastic in the nitrogen tank storage room, did not extend the Contract completion date but increased the Contract amount by \$2,500 to \$660,730. SA #5, for leveling the floor in Equipment Alcove C3-SA, extended the Contract completion date 2 days and increased the total Contract price to \$662,180. SA #6, executed on May 29, 1996, dealt with the welding of metal studs and added furring, extended the Contract completion date 5 days, and increased the total Contract price by \$5,900 to \$668,080. SA #7, was issued to provide an additional telephone outlet and intercom, increased the Contract completion date 1 day and the total Contract price by \$1,755 to \$669,835. SA #8 involving changes in the OR, extended the Contract completion date 5 days and the total Contract price by \$9,539 to \$679,374. SA #9 addressed raising conduits in OR#1, extended the Contract completion date by 5 days and raised the total Contract price by \$7,665 to \$687,039. SA #10 added a new electrical circuit and furring, extended the Contract by 2 days and increased the Contract amount by \$1,200 to \$688,239. SA #11, for filling a door opening, extended the Contract completion time by 3 days and increased the Contract amount by \$1,500 to \$689,739. SA #12, finalized on August 12, 1996, provided for the redesign of modular head units in the Patient Recovery Area, extended the Contract completion date by 1 day, and increased the Contract amount by \$5,880 to \$695,619. SA #13, modifying air supply diffusers, increased the Contract amount by \$6,915 to \$702,534.98 and added 14 days to the completion date. SA #14, added a Nurse Call/Code Blue Panel in the Patient Recovery Area, increased the Contract price by \$3,471, and provided that “[t]he completion date of the contract will be extended at later date based on

actual delivery of the [] panel.” SA #15, to install hardware, increased the Contract price by \$19,175 to \$725,180.97 and the Contract time by 19 days. SA #16, issued to modify casework in room 3A-137, increased the Contract price by \$536.02 to \$732,853 [sic] and extended the completion date 1 day. SA #17, added conduit above OR #1, increased the Contract time by 1 day and increased the Contract price by \$1,750 to \$734,603. SAs ##3 through 15, all contained the same following reservation language:

This change represents full and final compensation for money and time associated with changed work, including all direct and indirect costs. The Contractor reserves the right to claim impact costs of this change on unchanged work.

(R4, tab 7)

SA #18, related to the “Road-Work Delay in Feb. 1996,” and executed on December 31, 1996, extended the Contract completion date an additional 10 days to January 19, 1997, increased the total Contract price by \$5,400 to \$740,000, and contained the following reservation language:

The consideration represents a complete equitable adjustment for all costs, direct and indirect, associated with the work and time agreed to herein, including, but not limited to, all costs incurred for extended overhead, supervision, disruption or suspension of work, labor inefficiencies, and this change’s impact on unchanged work.

(R4, tab 7, #18)

On January 7, 1997, CO Prescott, Mr. Lee and John Yu, Bay’s on site superintendent, viewed the project site with VA personnel and discussed several items of work still needing to be completed. In anticipation of Bay’s projected

turnover of Phase I on January 29th, the VA met again with the Contractor on January 15th, and identified what it considered were several major outstanding Phase I items. The VA warned Bay that it was extremely important that the date for turnover of Phase I, and the beginning of Phase II, be accurate so that the move procedures could be scheduled. It asked Bay to submit a schedule for completion of the entire project, by January 23rd. Bay responded on January 16th that it would complete most of the punch list items by January 28th, but would not be able to resolve the floor leveling and nurse call issues by that date, and a letter would follow to clarify these issues. On January 22, 1997, CO Prescott directed Bay to level the floors in OR #1. Bay responded the next day that it would "progress with the work under direction," but that the VA should be advised there would be a "money and delay claim." Upon the VA's inspection on January 23rd, several problems were found which the VA communicated to Bay. By letter dated January 29, 1997, Mr. Lee indicated a date of February 14, 1997 for the completion of Phase I. (R4 Supp., tabs 8, 9, 19, 20; tr. II/245)

CO Prescott informed Bay on January 30, 1997, that it was in "technical default" because it was clear the Contract would not be completed by January 30, 1997. Noting that the VA was not waiving the completion date or any of its rights associated with damages for late performance, CO Prescott instructed Bay to provide a written completion schedule by February 7, 1997, and to complete the job in an expeditious manner. He testified that Bay was failing to make satisfactory progress, and in February he received a letter from them, but did not consider it to contain a realistic schedule. Not having received what he considered to be a realistic schedule, CO Prescott, on February 26, 1997, sent Bay a Show Cause Notice noting several deficient conditions and charging it with failing to diligently pursue completion of the Contract. In the Show Cause Notice CO Prescott instructed Bay to present in writing any facts bearing on the

question of whether Bay's failure to perform arose from causes beyond its control and without fault or negligence on its part within 10 days of receipt of the letter. (R4, tabs 4-5)

The Contract daily logs reveal that, after performing demolition, Bay characteristically staffed the project with a supervisor and one other worker, typically a carpenter or a laborer. On some days, it would have both a laborer and a carpenter, on others, neither. The daily logs show no work being performed on March 13, 1996 and daily logs are missing from the record for the following dates: March 14, 15 and 18; April 5 and 17; May 8 and 27; June 18; July 5, 15, 26, August 23 through September 9; September 10 and 11, September 13 through October 8; October 22, 25, 28, 31; November 5 through December 4; December 26, 30, 31; January 2 through 8, 1997; January 17 through February 24. According to the CO and COTR, in November and December 1996, Bay had virtually stopped working on the project. The daily logs do not indicate Bay's crews were slowed down, idled or stopped in its day-to-day progressing of the VA project work. There were some differing site conditions encountered during Phase I, some changes were issued, and 19 supplemental agreements were executed, but, based on the daily logs, Bay kept working. (R4 Supp., tabs 12-15, 52; tr. II/243; tr. III/18-19)

The record is not clear exactly when Bay actually stopped working on the VA jobsite. The daily logs show that in November 1996, Bay worked approximately 20 hours (2 days on site); in December it worked about 142 hours (10 days on site); and in January around 90 hours (6 days on site). Based on the daily logs, January 16, 1997 appears to be that last day Bay worked on the jobsite, but Appellant uses February 24, 1997 as last day of Contract performance. There are also references in the record that Bay was working on site as of January 22, 1997. CO Prescott testified: "we were actively trying to make this work until it

appeared that they had walked – well, they had done enough to remain a presence on the site, but there was no progress being made to fixing the – or finishing the phase.” Bay called no witnesses with reliable knowledge about how the day-to-day work progressed on the VA project site, or to address when it actually stopped performing on the site. (R4 Supp., tabs 19, 52; tr. II/165; tr. III/246)

The parties met March 6, 1997, and agreed to a “no-cost settlement” ending the Contract. This agreement was formalized by marking up a February 24, 1997 letter from CO Prescott addressed to Bay’s President, Young Sik Kay (hereinafter referred to as Agreement). The Agreement changed the date in the letter to March 6, 1997, and reading the many mutually initialed changes and corrections that were handwritten into the February letter, the Agreement states:

The parties agree to a no cost settlement (Termination for Convenience of the Government) to end the referenced contract effective March 7, 1997. The parties agree to the following:

1. In return for the Contractor agreeing to a no cost settlement (Termination for Convenience), the VA will not seek Termination for Default.
2. All requests for contract adjustment and or claims related to Phase I of the Contract remain in force:
 - a. the parties will attempt to settle these requests/claims,
 - b. if the parties have not reached a settlement by April 7, 1997 the parties will request that ADR be used to resolve the remaining issues.
3. No requests for contract adjustment and or claims have been or will be submitted related to Phase 2, 3, or 4 for the Contract.
4. The VA will reimburse the Contractor for materials (purchased prior to February 24, 1997),

they or their subcontractors, have purchased for use in other phases of the contract. These materials must be turned over to the VA along with a copy of the invoice for the materials.

5. The effective date for the termination is March 7, 1997.

(R4, tab 6)

CO Prescott subsequently issued Change Order E on March 7, 1997, which provided: “[e]ffective March 7, 1997 this contract is Terminated for the Convenience of the Government as a no cost settlement described in the attached March 6, 1997 letter.” When queried about his understanding of the “no cost settlement” he had executed, CO Prescott stated, “[a]t the time we signed it, we had several questions related to change orders that hadn’t been resolved. And the materials that Bay had bought that they had not used. Those are the only two areas I thought we’d be discussing after we signed this [A]greement.” (R4, tab 7; tr. II/245-47)

On March 27, 1997, Bay submitted a claim it characterized as a “partial request for contract adjustment related to Phase I of the Contract,” seeking an equitable adjustment of \$402,653. The claim set forth 7 items, totaling \$774,799, for which the Contractor claimed it was entitled to be paid and included: 1) Price for Original Contract Work (Phase I) - \$447,979; 2) Agreed Change Orders - \$95,628; 3) Unresolved Change Order Amounts - \$59,524; 4) Unabsorbed Home Office Overhead (Eichleay) - \$57,840; 5) Direct Overhead (Delay) - \$53,421; 6) Impact/Out of Sequence/Piecemeal/Etc.- \$ (blank); 7) Material - \$60,407. From the \$774,799, Bay subtracted out \$372,146.90, the payments it had already received from the VA, to reach a claimed total amount due of \$402,653. Bay indicated that it would be submitting its “impact” claim under separate cover when it completed its calculations. Bay had not previously questioned the amount of the progress payments it had received. (Tr. II/243, 249-50)

Bay relied on John Kim, one of its project managers, to provide its primary testimony and clarification on how its claims were calculated. As a project manager, Mr. Kim performed a variety of functions including negotiating contracts, estimating, scheduling, and monitoring job progress, and by the hearing he had managed approximately twelve to fifteen projects. According to Mr. Kim the estimator and construction manager for the VA project was Mr. Lee. Mr. Kim assisted Mr. Lee in developing Bay's claims and documentation, but he had little, if any, involvement in the VA project as it was being performed. It was Mr. Kim who ultimately prepared the time analysis relied on by Bay for its case-in-chief, and he based his analyses and testimony on a post performance review of Contract documentation. (Tr. I/43, 46-48, 70, 101-05)

Mr. Kim stated that Mr. Doerr was Bay's scheduler and project manager assigned to the VA project and John Yu was the Contractor's on "site superintendent" and "working foreman." Mr. Yu "on occasion" performed some work on the site and may have assisted in scheduling. He testified that Mr. Doerr prepared the "original baseline schedule" for Phase I, and determined the project tasks and their durations. Mr. Kim also "believed" that Mr. Yu prepared the unsigned and undated chart, referred to at hearing as the "summary chart." He thought Mr. Yu saw the project documents when he prepared the chart and used Mr. Doerr's schedule, daily logs, correspondence and paperwork that applied to change orders to create the chart. Mr. Kim describes the "summary chart" as containing the "original baseline schedule" on one "grid" and the actual schedule of work performed during the Contract period on another "grid." (Tr. I/95-6; tr. II/16-19, 103, 122, 183; R4 Supp., tab 51)

Neither Mr. Doerr nor Mr. Yu provided testimony at the hearing. Mr. Doerr left Bay while the Contract was being performed, Mr. Kim was not sure when, but he thought it was sometime during 1996. Mr. Kim says he met with

Mr. Doerr to prepare for the ADR proceeding and that was how he knew “what he was thinking about, how he planned the sequence of his activities and the specific order he sequenced it.” (Tr. I/95-96; tr. II/124; tr. IV/16)

On April 14, 1997, Bay submitted a claim of \$67,739.86 using what it referred to as the “measured mile” method for alleged “VA caused delay, disruption to the anticipated schedule of work, performance of work out of sequence, the performance of work in a piece meal fashion, suspension of work, defective specifications and drawing, and so forth.” Bay certified its claims on May 12, 1997. The lost productivity claim was subsequently revised downward to \$50,194 using what Bay called the “industry standard” method. On April 30, 1997, Bay wrote the CO:

Per our signed agreement . . . all parties are to settle all claims by April 7, 1997. Bay submitted all claims by March 26, 1996, and to this date, no settlement attempts have been made by DVA.

All claims were submitted March 27, it should [be] familiar [to] you because most of the items we went through several times already.

(R4, tab 31C3; R4, tabs 10, 16; R4 Supp., tabs 22, 23)

To help address Bay’s claims, CO Prescott sought the involvement of the VA’s Office of Inspector General (VA OIG) Contract Review and Evaluation Division to audit portions of the claims. The assigned auditor, Marci Vineyard, subpoenaed documents and initiated numerous contacts May through September 1997 to obtain information about Bay’s claims. (R4, tabs 14, 15, 20, 22, 22A, 22B, 24, 25)

On July 15, 1997, CO Prescott wrote the Contractor about the portion of its claim seeking reimbursement for materials. He indicated his intention to reimburse Bay for materials purchased prior to February 24, 1997, pursuant to

the March 6 Agreement. The CO noted he wanted to inventory the materials and obtain copies of their invoices prior to accepting them, but that he was prepared to accept them on July 23. He instructed the Contractor that items not accepted were to be removed from VA premises, as well as other remaining items owned by Bay, including storage units, vehicles, tools and material. (R4, tab 31C3) On August 12 and 18, 1997, Bay delivered certain materials to the VA under the terms of the March 6 Agreement, that the Government subsequently accepted. The VA refused to accept some items for which Bay did not have sufficient documentation, and the Contractor was allowed additional time to obtain that information. (R4, tab 31C4)

Bay formally requested a final decision on its claims on January 15, 1998, alleging that the Government had breached its Agreement in refusing to use Alternative Dispute Resolution (ADR) to resolve the outstanding claims and in failing to reimburse it for materials. Other letters were sent by Bay or its attorney noting the VA's "broken promises" and "lack of action" in failing to negotiate Bay's claims. CO Prescott wrote Bay on March 12, 1998, stating he was reviewing the multiple claims and would issue a final decision by April 15, 1998. (R4, tabs 31-34)

To assist the CO in making his final decision on the aspects of the claims relating to delay, Boris Lloyd, a scheduler in the VA's Claims and Risk Management Office, performed a time analysis on the claims. That analysis, based on the Contract daily logs, concluded that the VA was liable for delay and suspension associated with the following "work stoppages": 7 days waiting for the VA asbestos report, 13 days waiting for a VA response for the concrete pads (SA #2), 14 days waiting for a decision on elevations for duct work, and 20 days where the VAMC had issued a work stoppage on the ceiling work in OR #1. The analysis also cited a total of 23 days during three periods of time that the daily

logs showed no work being performed and noted, “[r]eason for work stoppage unknown.” The analysis provided:

VI. Summary

This contract was awarded to be accomplished in four (4) phases within 270 calendar days after a 45-day restraint. Within the 270 calendar days, there were three VA moves between the four phases. Each move consisted of fourteen (14) calendar days, totaling forty-two (42) calendar days. Subtracting the forty-two calendar days of VA move restraints leaves a remainder of 230 calendar days to perform the contract work for the four phases.

The daily logs indicated a total of 77 calendar days of work stoppages in addition to existing change order days granted. The total contract time granted for change orders was 133 calendar days. [An] additional 20 calendar days are recommended that are associated with existing change orders. The total calendar days granted and possibly to be granted are 230 days.

* * * * *

VI. Recommendation

There was one hundred thirty-three (133) calendar days extension to the contract completion date for change orders issued to date. An additional twenty (20) calendar days associated with existing change orders are recommended for extension to the contract completion date. There are seventy-seven (77) calendar days of work stoppages indicated on the daily logs in addition to existing change order days granted.

(Tr. III/147; R4, tab 38A)

The audit of Bay's claims was completed on March 25, 1998, and the VA OIG auditor, Marci Vineyard, recommended that the VA allow Bay a total payment of up to \$69,751. The auditor noted:

Bay's books and records were in a state of disarray. We requested several detailed general ledgers which supported the claimed amount, however, we were provided at least two detailed ledgers which contained differences. In order for us to satisfy ourselves that we were working with the best information available from which to compute amounts due, we verified the detailed general ledger totals to Bay's tax returns. While there were differences, they were not material, and therefore, we are satisfied that we have reached our conclusions based on the best information available.

(R4, tab 36)

The auditor determined that both Messrs. Doerr and Yu were supervisory employees whose salaries were charged indirectly to Bay's overhead account, and concluded: "[b]ecause Bay typically considered their time as an indirect expense, and there was not evidence of direct time spent on the Contract, we included all indirect salaries in the overhead pool for computing the unabsorbed overhead rate." In addition to noting that Messrs. Doerr and Yu salaries were charged to Bay's overhead account, Ms. Vineyard testified that it was questionable whether there was any unabsorbed overhead at all because "many of the people who were working on this Contract were also working on other contracts [so] there was direct labor still being generated, even though it wasn't for this Contract." Regarding Bay's \$447,979 claim for original contract work (Phase I), the auditor calculated that the net amount of the claim was actually \$171,460 ($\$447,979 + \$95,628$ (value of executed change orders) - $\$347,147$ (payments made by VA)), and she questioned the entire \$171,460 claimed as representing "uncompleted Phase I work in the amount of \$123,248 and Phase II

work in the amount of \$48,212” and concluded that “the Government should not pay for work which was not performed and the settlement agreement specifically excluded Phase II costs.” The auditor also noted it was impossible to determine from Bay’s records what materials had actually been paid, and that its claim was “overstated by \$394,154.” The audit allowed \$21,930 of the \$59,524 claimed for unresolved change orders as being supported by appropriate documentation, and questioned the entire \$53,421 claim for direct overhead, as well as the figures Bay used in computing its unabsorbed overhead rate. The audit concluded that the Contractor’s claimed unabsorbed overhead rate of \$240 a day was not supported by its documentation. However, urged to compute a daily overhead rate, she ultimately was able to calculate the rate of \$146 a day, based on making multiple adjustments made to the home office overhead pool and billing amounts over the contract period. Applying that daily rate to the CO’s determination that the Government was responsible for 77 days of delay, the auditor determined unabsorbed overhead of \$11,242, as opposed to Bay’s claimed \$57,840 (241 days times \$240 a day). The \$67,742.86 disruption claim was disallowed in its entirety based on the auditor’s conclusion that, other than the disruption that was already addressed in the delay claim, Bay had failed to demonstrate that any disruption occurred. Finally, the audit questioned \$23,828 of Bay’s \$60,407 claim for material costs, concluding that they had already been paid by the CO, who had collected, verified and inventoried the material. (R4, tab 36; tr. III/315-16, 359, 369)

CO Prescott issued a final decision on March 25, 1998, stating “[t]he March 6, 1997 agreement terminating the Contract expressly stated that no requests for Contract adjustment or claims have been or will be submitted related to Phase 2, 3, or 4.” CO Prescott denied what he characterized as a “mistake in bid” claim, that later was referred to as the “balance due” or “value

of the work” claim. He determined that the claim had not been brought to VA’s attention until after the Contract was terminated and Bay had “failed to present a sum certain and clear and convincing evidence that a mistake in bid was made [or] even present a definite amount.” The CO determined that on the seven “unresolved change order” claims, Bay was entitled to \$33,172.29: \$5,719.84 for the HVAC Johnson Control claim; \$5,850.61 for the stainless steel duct claim; \$0 for the Muzak claim; \$865.29 for the Muzak Intercom claim; \$8,092.59 for the floor leveling claim; \$0 for the medical gas oxygen claim; and \$1,401.96 for the Door No. 9 claim. Regarding the Contractor’s claims of delay, disruption and inefficiency, including unabsorbed home office overhead (Eichleay) (\$57,840), direct overhead (delay) (\$53,421), and loss of productivity (\$67,739.86), CO Prescott used the Government’s time analysis to conclude that Bay was entitled to compensation for all 77 days of “work stoppages” found in the analysis. He applied the daily overhead rate of \$146 as computed by the VA OIG auditor and determined that Bay was entitled to \$11,242 for its “delay, disruption and inefficiency claims,” and denied the claims for direct overhead and loss of productivity. (R4, tab 35)

Sometime after receiving the VA audit results, Bay retained the assistance of Michael R. Huhn, CPA, Jones, Henle & Schunk, to comment on its extended home office overhead claim and the overhead calculations contained in the VA OIG’s audit. Mr. Huhn determined that Bay’s daily overhead rate should be recalculated and concluded that it was \$342 a day, as opposed the \$240 a day rate used in its original claim. Using the Eichleay formula, he applied the \$342 daily rate to Bay’s claimed 241 days of delay concluding the Contractor was entitled to \$82,422 in additional extended home office overhead. (R4 Supp., tab 10; R4, tab 6)

On May 18, 1998, Bay appealed the CO’s final decision where the various other claims were docketed as VABCA-5594, 5621-28, and 5831. The appeals

were placed in a suspense status and an ADR proceeding was conducted that resolved some of the claims. On November 19, 1998, a Stipulation of Settlement, SA #19, was executed by the parties disposing of VABCA Nos. 5621-24, 5627 and other issues that had arisen (stainless steel duct, Muzak, and floor leveling). The Stipulation further provided:

This executed settlement effectuates a compromise and settlement of the disputed claims (including attorney fees under the *Equal Access to Justice Act* for such claims) for all costs under these appeals and change orders, but reserves Bay's right to pursue all remaining claims pending before the board, including VABCA-5625, unabsorbed overhead, VABCA-5626, delay, VABCA-5628, loss of productivity, VABCA-5594, original contract and VABCA-5381, change orders.

(R4, tab 7, #19)

Accordingly, on November 30, 1998, VABCA-5621-24 and 5627 were dismissed with prejudice. The remaining appeals which are the subject of this decision, were reinstated to the Board's active docket on December 15, 1999 as: VABCA-5594 and 5831 (payment for the "balance due" or "value of work" for the Contract and supplemental agreements), VABCA-5626 (direct labor claim), VABCA-5625, (unabsorbed overhead claim), and VABCA-5628 (loss of productivity/disruption claim).

To calculate Bay's claims for what it characterizes as the "value of the work" it provided under the Contract (VABCA-5594 and 5831), Mr. Kim revealed that he took the base bid amount "that was comprised of both Phase I and II work," and assigned a percentage to each branch of work in Phase I and II. His "overall conclusion" was that Phase I work constituted 52% of the base bid amount estimated by Mr. Lee and Phase II work constituted 48%. Concluding

that Bay had completed “virtually all” of Phase I and all of the work covered by the SAs, he added in the value of the SAs to the calculation. Based on his estimation and judgment that Bay had performed \$10,067 worth of Phase II work he included that amount in the claim. He also included an adjustment in the base bid amount to reflect what Bay had determined was a “misclassification” made in the bid by the HVAC subcontractor. Mr. Kim noted that he could not document the amount of plumbing completed and he did not include that in his calculations. Mr. Kim used the figures he derived in two alternate methodologies, one he calls the “deductive” approach, and the other he calls the “additive” approach. Using these two methodologies and Mr. Kim’s testimony, Bay argues that the record supports its entitlement to either \$98,717 or \$97,838. (R4 Supp., tab 3; tr. I/59-93; App. Br. at 14-18)

COTR Katanics testified that it was not until after the Agreement terminating the Contract was signed that Bay began to challenge the amounts it had been paid, seeking additional monies for what it characterized as “the value of work performed.” Prior to that time, he had authorized payments to Bay as he typically did in other contracts. Describing his practice, he testified that at the beginning of a contract a contractor is typically required to submit what is referred to as a “schedule of values” that sets forth the cost breakdown for different items of work forming the total price of the Contract. As part of his duties, COTR Katanics, together with his supervisors, is responsible for reviewing the correctness of the schedule of values for payment purposes. COTR Katanics explained that he normally relies on “actual work completed” to price the work for payment purposes. He testified that a contractor would give the VA “a cost breakdown sheet for different items of work or list as to their total price” and “[w]e base our progress payments on that.” The schedule of values submitted by a contractor is analyzed, verified and checked to determine the

reasonableness of the values assigned to each item or element of work. Once approved, progress payments are based on that schedule, together with the VA's own worksheet of the breakdowns. COTR Katanics provided a detailed explanation of how payment requests were made and reconciled by the VA based on Bay's own schedule of values and the percentage of work completed. Both CO Prescott and COTR Katanics testified to their belief that Bay had been adequately paid for the work it completed, including the SAs. (Tr. III/13, 15, 19-42; tr. II/263-64) The payments made to Bay were reflected in the progress payments and supporting documentation. (Exhs. B-1 through 14)

In January 1996, Bay submitted its "schedule of values" showing the value it placed on each branch of work for the base bid and each of the additives. The base bid and Bay's schedule of values included both Phase I and Phase II work. COTR Katanics reviewed it and found it "to be reasonable with what we felt was the actual cost of each phase - each item of work." He used Bay's schedule of values to make monthly progress payments. Each month, when Bay submitted its progress payment request, he would evaluate the request by insuring that required documentation was included and inspecting the percentage of work completed against the dollar value on Bay's cost breakdown sheet. COTR Katanics would then make recommendations to the CO on what should be paid. He based his payment recommendations on the amounts Bay had given the VA on its cost breakdown sheet and the percentage of that item of work that he saw as completed or in place. He observed the work that Bay had performed, and made his recommendations on progress payment by reconciling the completed work with Bay's payment requests. Typically, he found there was not a great variance in the amounts Bay requested and the amounts the VA paid for progress payments, and Bay did not question the amount of the progress payments authorized and made by the VA during the Contract. COTR Katanics

testified that at times during the Contract he was “concerned” that Bay was requesting payment for more than they had completed, especially change order work. However, he did not raise this issue with the Contractor at the weekly project review meetings. The first time COTR Katanics learned that Bay believed it should receive more than what was paid through the progress payments was long after the Contract was terminated. (Exh. B-1a; tr. I/52; tr. III/16, 18-22, 34-43, 93)

According to the VA’s monthly progress payment records, Bay received fourteen progress payments for a total of \$454,984.61. The first ten progress payments were made based on Bay’s requests for payment, its Schedule of Costs and the VA’s evaluation of completed work, and generally reflect payment for less than Bay had requested. In the remarks section Progress Payment Report, the VA consistently noted the project was behind schedule and lacked various submittals. There is no indication that Bay took exception to or otherwise complained about the progress payments as they occurred. Progress Payment No. 11 released the \$35,000 retainage held by the VA and Progress Payment Nos. 12 and 13 were for unused supplies and equipment. Progress Payment No. 14 and SA #19 addressed the payments to resolve VABCA Nos. 5621-28 that included several items addressed by the CO’s March 25 final decision. Bay was not paid for the \$11,242 of unabsorbed overhead to which CO Prescott found it entitled in that final decision. (Exhs. B-1 through 14)

Bay did not complete the Phase I work. The HVAC system, OR lights and other electrical connections, connections for the Phase I ducting system, medical gas cabinet doors, and hardware were not completed. The VA contracted with Johnson Controls to finish the work on the HVAC system. COTR Katanics testified that the VA could document that it took about \$9,000 to get the surgical unit functioning, but he believed that there was other work that was not

documented. He estimated that the cost to the VA for completing the work through final inspection and punch list cost the VA around \$20,000. The VA also introduced photographs taken from February 5 through March 6, 1996, showing Bay's lack of progress, and a videotape made after March 6, 1997 showing that various items of work were not completed. (Tr. II/274-81; tr. III/45-47; Exhs. G-1 and 2)

To support its claim of Government-caused delay and suspension to its critical path, Bay relied on Mr. Kim. Bay's claim was essentially a total time claim that was derived, in part, by subtracting the 66 days Bay said it planned to complete Phase I from the 370 days it said it actually took to perform the Contract. Part of the time analysis performed by Mr. Kim was comprised of a chart containing the original baseline schedule on one "grid" and what the Contractor asserts was the actual daily performance on another "grid." (Tr. IV/12; R4 Supp., tab 51) Mr. Kim concluded that the Government caused 304 days of critical path delays during Phase I. In the five years he has worked for Bay as a project manager, Mr. Kim has managed approximately 12 to 15 projects. As a Bay project manager, he testified he is responsible for "scheduling, estimating, negotiating contracts with the owner, as well as the subcontractors. And, of course, a big part of the job is to monitor progress and well as schedule the project, which is again using the CPM." Mr. Kim asserted that the first critical path delay to affect the completion date in his schedule was the roadwork delay. Subsequent critical path delays were related to asbestos, OR #1, wall framing, rough plumbing, rough electrical, modular head wall, door hardware (No. 9 door), medical gas, and floor leveling. (Tr. II/6-102, 138-175; R4 Supp., tabs 12-19, 51)

Mr. Kim acknowledged that, during his review of documents, he saw several items that were delayed on the project but which were not on the critical

path. He described a "critical path item" as "the one item that must be performed . . . [a]nd unless it is performed, it affects the completion date of the schedule." Mr. Kim also said he understood the "critical path method" for determining delay as follows:

[O]ne takes a complex project and divides it into a number of sub-projects. Each sub-project is given a duration and a basic order of precedence. Once that information is inputted into the computer, it allows the scheduler to review the most efficient method that he sees -- that he could possibly see.

The term "critical path" or any item that's on a critical path, the fact that it's critical, it's critical because basically every task has a period, an early and late start date. The variance between that is called the float. When that float becomes exhausted, it is said that a task is critical.

(Tr. II/11, 129)

Mr. Kim described the computer-scheduling program he used to perform his delay analysis:

One must identify basically what the tasks of the . . . projects are. And then a duration period is added to each one of those tasks. And, of course, they're sequenced, thereby giving -- thereby allowing a scheduler to review a schedule and to determine the most efficient attack that he sees fit.

Of course by doing that, one can identify critical paths, as well.

Q And with the input of the data, does the scheduler or the program determine the critical path?

A Once the data is inputted, the program itself will designate a critical path. However, it is up to the scheduler to sequence a task properly.

Q You're talking about the input into the --

A Yes, yes. It's up to the scheduler to properly input the task.

Q Is this the process you used in this -- in your analysis, your critical path analysis?

A Yes.

(Tr. II/9-10)

The Doerr "baseline schedule," as it was understood by Mr. Kim, broke the Contract work into tasks (or sub-projects), calculated the durations for each task (or sub-project) and established the start and finish dates of each task to show the sequencing of events. Sometime later, also according to Mr. Kim's belief, Mr. Yu took that information and created a schedule chart showing the project's critical path. Mr. Kim stated he used that chart to perform his critical path delay analysis. He said he identified the tasks of the project, the durations, and the sequencing; and inputted the information into the computer program to generate a schedule showing critical and non-critical tasks as represented in Mr. Doerr's original baseline Phase I schedule. Referred to at hearing as the "master chart," Mr. Kim stated his chart showed "tasking" representing sub-projects, with the duration of each sub-project identified with a start and finish date. Each task was linked and sequenced in a specific order. According to Mr. Kim, after he inputted the schedule, the computer program determined the critical and non-critical tasks, the red dots on the chart being what the computer had identified as critical paths and the blue what it had identified as non-critical paths. Yellow represented critical path delays. Mr. Kim also produced 13 charts that he testified showed his critical path analysis and monthly "snapshots" of the tasks that were critical during a particular month, which were replicated on the

“master chart.” He performed these monthly updates from March 1996 through January 1997. (Tr. II/16-28, 53, 57, 91; R4, tab 51; R4 Supp., tab 11-19; Exh. G-9)

Determining that he was “satisfied” with the Doerr schedule showing Bay completing the Phase I work in 66 days, Mr. Kim used that schedule as the basis for his delay formulations. However, Mr. Kim was not sure whether the 66 days projected for Phase I completion by that schedule were based on “calendar,” “working” or “performance” days. In making his calculations however, he treated them as “performance” days. The document itself does not contain information on who created it or how it was generated. None of the witnesses seemed exactly sure when Bay submitted the project schedule or when it was received by the VA. COTR Katanics thought the VA received Bay’s schedule around the end of January 1996. According to Mr. Kim, Bay had planned to perform demolition, wall framing, drywall, door frames and hardware, glazing, finished carpentry, trim and painting with its own crews, and have its subcontractors perform the remaining work, including mechanical and electrical work. Other than various SAs extending the overall Contract completion date there is no record of Bay changing, modifying or updating its Phase I schedule to reflect the changes and various other events as they unfolded. (R4, tab 1; R4 Supp., tab 52; Exh. G-9; tr. II/124, 142-43, 212-15; tr. III/16)

Mr. Kim calculated that it actually took Bay from February 21, 1996 to February 24, 1997, or 370 days, to complete the Phase I work. (Tr. II/104) To arrive at his figure of 304 days of delay, Mr. Kim subtracted the number of days in which Mr. Doerr planned to complete the Phase I work (66 days) from the number of days of actual Contract performance (370 days). (Tr. IV/12) He stated, however, that was not how he determined that 304 days of delay were attributable to the Government. That calculation, he said, was arrived at through his critical path delay analysis. (Tr. IV/17)

Bay asserts that Mr. Kim's "as-built" schedule analysis shows that the following delays to the critical path occurred: 26 days in March 1996, 25 days in April 1996, 35 days in May 1996, 22 days in June 1996, 18 days in July 1996, 47 days in August 1996, 23 days in September 1996, 20 days in October 1996, 31 days in November 1996, 30 days in December 1996, 23 days in January 1997 and 6 days in February 1997. This amounts to 306 days of critical path delays (Bay actually claims it incurred 304 days of delay. In performing his analysis, Mr. Kim did not find any "concurrent critical delays." (R4 Supp., tab 51; tr. II/6-102, 138-175)

Bay claims the critical path delays and suspensions as follows: VA roadwork (memorialized in SA #18, extending the Contract completion date 10 days and increasing the Contract price \$5,400), asbestos (memorialized in SA #4 and CO-A, extending the completion date 0 days and increasing the price \$2,500), concrete curbs (memorialized in SA #2, extending the completion date 3 days and increasing the price \$3,336), stainless steel ductwork in OR #1 (memorialized in SA #6, extending the completion date 5 days and increasing the price \$5,900), modular headwall (memorialized in SA #12, extending the completion date 1 day and increasing the price \$5,880), door #9 (memorialized in CO-C), and redesign of floor (SA #19, extending the completion date 0 days and increasing the price \$30,074). (App. Br. at 18-48)

Mr. Kim's analysis only addressed Phase I of the Contract. He also acknowledged that he failed to include in his analysis the time required to perform the change order work itself or the time agreed to in the SAs, but asserted that the time associated with those items should not have a significant impact on his analysis or the number of days of delay attributable to the Government. Though he says he considered them, "[I]n order to make it easier to review, and thinking that it wouldn't be relevant," his analysis did not show

late start dates. He found there to be no late submittals that delayed performance or negatively impacted a critical path task. He further concluded that, because Bay did not know “the actual duration of the delays or when they would end . . . it would be impossible to determine – to calculate when this job would end, and thereby, be able to get another project.” (Tr. II/99, 125; tr. IV/15-19 and 32)

The schedule that Mr. Kim relied upon for his analysis did not include a work activity for submission and approval of submittals. He did not know whether Bay had performed any tasks or made any submittals until it mobilized on February 20th, and acknowledged timely submittals as a crucial element allowing a work activity to start. Mr. Kim found no submittals that impacted the critical path. Mr. Kim also testified that he did not know whether Bay’s schedule included time for subcontractor work, even though the daily logs show a great deal of the work was performed by subcontractors. “Other than the crews typically used by Bay,” he did not know the size of the crews Mr. Doerr had planned on using when he planned his schedule, and based his analysis on what Mr. Doerr’s “typical practice would be.” When he reviewed the daily logs, he made little note of the crew size actually performing an activity other than observing that, to him, it seemed to him to be “adequate.” He did not evaluate the days where the daily logs indicated that no work was performed, or the days where there were no daily logs. He also acknowledged his failure to take into account the release language in SA #18 in which Bay agreed that the consideration it received in SA #18:

Represents a complete equitable adjustment for all costs, direct and indirect, associated with the work and time agreed to herein, including, but not limited to, all costs incurred for extended overhead, supervision, disruption or suspension of work, labor inefficiencies, and this change’s impact on unchanged work.

(R4 F, tab 7, #18; tr. II/169-71))

Boris Lloyd, a scheduler in the VA's Office of Facilities Management Consulting and Support Service, was called on behalf of the Government to provide testimony on the quality and reliability of Mr. Kim's time analysis. (Tr. IV/112) As a scheduler, a position he has held for 22 to 23 years, Mr. Lloyd assists in the development of phases and plans, reviews schedules and durations on major VA projects, and makes recommendations for approval of schedules. He performs monthly updates on the major projects assigned to him, analyzes change orders and their criticality as part of that monthly review, and provides recommendations and monthly status reports to the VA project managers and resident engineers assigned to those projects. (Tr. III/112-13, 132-36, 168-75; tr. IV/19)

Asked to comment on Mr. Kim's time analysis, Mr. Lloyd concluded that the analysis was flawed because it only covered Phase I, its logic or methodology could not be determined, and it did not include days required between phases. He stated:

His analysis didn't relate to specific change orders. He had titled bars, and I believe I'd have to refer to his diagram to say yes or no, as it relates to that issue.

Q Do you have any other comments about his work?

A There were questions that I had in my mind in reviewing it that I really couldn't make concrete determinations on exactly his methodology, as well as the logic that he was presenting. One, there were no reports to back up the graphs that he had generated which would give me an indication of the early starts and finishes and late starts and finishes, which would now, of course, be -- how to be able to determine the critical path.

But what would be more important, specifically seeing what the float is that's generated on the various delays during the various periods. There were dates that were shown on his graphs, but they weren't referenced whether they were early dates or late dates.

Q Can you do an analysis without the late finishes and the early finishes?

A Well, like I said, that shows -- that gives you the relationships in terms of when an activity can start or stop, and how it relates to the other activities within that network.

* * * * *

Not having a total float report, I was not able to be able to follow through the logic sequence of his events or tasks, as he described them, in his schedule to make determinations in terms of the reasonableness of the relationships between the tasks within that schedule, as well as the conclusion that he was trying to draw as to what was critical versus not critical.

* * * * *

It's hard to draw other conclusions, because what was submitted was very vague, not being able to reference any type of material reports that actually showed logical connections to see how you get from the start point of a report as a status to the conclusion when you reach the completion date.

Q So you're saying he didn't show relationships?

A Not that I could follow, which is normally done. When you don't have the logic ties presented in graph form, then the next best source to reference is the reports that should be generated as a product of that graph.

(Tr. III/130-34)

When asked whether Mr. Kim's analysis was in any way helpful to understanding the timing on the project, Mr. Lloyd posited:

As far as drawing accurate conclusions, from my experience, then I would say no. As far as maybe discussing issues to bring attention, I would say that it was a first step.

But unless you take those issues and develop a total schedule, which was attempted by the Day One, to my understanding that Randy [Doerr] produced at the beginning of the project, if that had been carried through in their analysis, I think they would have had a better product in terms of how they would have affected the contract completion date.

(Tr. III/135-37)

Mr. Lloyd also performed a time analysis for the Government, reflecting 78 calendar days of delay associated with change orders and 28 days of suspension time associated with this Contract. (Exh. G-4; tr. III/118) To perform his analysis, Mr. Lloyd testified that he developed the "Day 1" Contract schedule using Bay's project schedule data reports, daily logs and Bay's as planned/as built chart depicting the tasks and planned durations. He looked at Bay's schedule and certain correspondence, and used Bay's 66 day schedule for his analysis explaining:

I used the schedule in terms of the activities and the durations. The established notice to proceed by a contract on this job was January the 10th of 1996. So I started to schedule it with the contractor's scheduled information as far as activities and duration at that point in time, calculating it to October the 6th, the schedule at that time was scheduled to the 7th, because the 6th was a holiday.

Also, I did include the VA 14-calendar day moves that were required in between Phases 1 and 2, 2 and 3, and 3 and 4 by contract.

(Tr. III/178-79)

Mr. Lloyd updated his developed Day 1 schedule to show performance and analyzed the change orders against the schedule in effect at the time of issuance/occurrence. He reviewed various documents, including the daily logs, and relied on discussions with CO Prescott and COTR Katanics, who were the Government representatives monitoring the Contract performance, to develop his analysis. He said that “[t]he change orders – the issues related to the change orders, based on the information provided, were put in the updated period that was evaluated that they occurred or that direction was given. If there was a period of time in terms of waiting for, that was a thought that was taken under consideration when hearing the historical information.” He acknowledged that he did not extensively review the Contractor’s RFIs to determine if they delayed completion. (Exh. G-4; tr. III/113-115, 118, 129, 176-79)

Based on his review, and starting the schedule analysis on January 10, 1996, the date of the notice to proceed, Mr. Lloyd’s time analysis showed a completion date of October 7, 1996. He said he then updated the durations on the various work activities on a monthly basis, including supplemental agreements and change orders. His monthly updates for several months showed “slippage” due to lack of progress on the part of the Contractor, as opposed to change orders. More specifically, in the March 1996 update, Mr. Lloyd’s analysis showed that the Contract completion date, or critical path, was impacted 17 days by CO-A/B (8 days) and SA #2, (9 days). SAs ##1 and 3 covered activities for which there was float in the schedule. In the April update, his analysis showed that three change orders (SA #4, asbestos abatement, SA#5, floor leveling and SA

#6, 16-gauge metal studs) extended the Contract completion date 3 days. In the May update, SA #9 had a 2-day impact, and in June there were no changes that impacted the schedule. Mr. Lloyd's July update showed the head wall units as the critical activity and he recommended a 28-calendar day variance as a suspension related to SA #12. The August status showed no variance in the predicted completion date, and the September status showed a 4-day impact due to CO #3 (Door #9 and SA #15). The October, November, December and January status reports all showed slippage on the completion date. Mr. Lloyd testified that the change orders applicable to the October update contained float and did not impact the schedule, and there were no changes applicable to the November, December and January updates. He attributed the slippage during those months to lack of progress on the part of the Contractor. (Tr. III/118-28)

He explained what he meant by his use of the term "slippage":

Slippage[s] in the report are the differences in the differing completion dates. If they pertain to a change order, it was put in for that particular period, then that comparison was made between a date that was established, that was just updated for progress, and then compared to the predicted completion date of the second rung. It included a change or changes. And that difference in the two dates as relates to a change is considered slippage.

If there is two periods where it's updated for progress only with no changes, and there's a difference in those two dates, then that is also referred to as slippage or variance in dates.

(Tr. III/205)

Mr. Lloyd's analysis did not address which, if any, periods of suspension preceded issuance of change orders and did not completely rely on what has been characterized by Bay as its "original schedule." He clarified that he took the

activities from that report, but that the report did not show the logic relationships between activities, so he made the necessary logic ties between the activities given in that report, "because the computer cannot calculate from one activity to another activity unless you have those logic ties." He testified, "[m]y purpose was to reproduce a schedule as close to the contract and the given information [as] I could to produce the cause and effect." He admitted that his schedule was not a complete "duplication of the original schedule" so it would not line up with most of the dates and relationships that Bay used. (Tr. III/178-80)

Mr. Kim agreed that because there were differences in the sequence of activities, Mr. Lloyd had "alter[ed] Bay's original schedule." He was asked about the importance of using February 20th as the "start date":

Q Okay. And in doing your critical path analysis is it important for you to start your critical path analysis on the same date as the project was scheduled to start, which was February 20th?

A Yes, that would be correct.

Q And the reason that it's important to start it on the February 20th schedule date?

A [I]f the scheduler accidentally or for whatever reason scheduled the project to start after the start date, it would have a path that should be indicated as critical would not be critical. Whereas, if a scheduler were to do the opposite, and start -- actually start -- try to put the project on a start date before the project was actually going to start, the critical path analysis would be faulty, because many of the paths that were not supposed to be critical would become critical.

Q And when -- if you didn't have the schedule start date, which is here February 20 . . . but let's say you used

a January 20 start date instead of the February 20 start date, what would be the consequence when you had monthly updates and placed in at that particular date on the monthly update events that happened, such as a change order or the beginning of a delay or things of that nature?

A Okay. Well, going back to the last question, theoretically if no delays were to ever occur from beginning to end, that the critical path may not be affected. However, if a start date is, say, January 20th rather than February 20th, and the delays were in a specific time frame, obviously that would have a great impact on the schedule, because, in effect, the change orders would be statused incorrectly in the project.

(Tr. II/29-30)

Mr. Kim commented on several other items he saw as deficits in the Government's time analysis:

Q Did you review Mr. Lloyd's analysis to determine whether he inputted the delays when they occurred?

A Yes, I have reviewed Mr. Lloyd's analysis.

Q Did he input any delays into his analysis?

A Yes, he has inputted delays into his analysis.

Q Has he inputted all of the critical path delays that you have inputted?

A It's not virtually all, but very close to all.

Q All right. And using the date from which he -- in his analysis and using the date from which he determined his critical path, did he use only the change order or supplemental agreement signature date?

A Yes, with the exception of one delay item, yes, that's correct. He used the date the supplemental agreements were actually signed to indicate when the delays -- I believe the start date of the delay would occur.

Q So did he give any -- in his analysis, did he -- let me ask you this. In your view, is beginning the critical path analysis with the supplemental agreement date appropriate or is it appropriate to start with the date the actual delay becomes critical for that item?

A I believe in order to have a clear -- to be the most accurate critical path analysis, you would have to look at the delay as a whole, not just the date the supplemental agreement was signed. So, therefore, any delay that may have occurred before, and even any period that may have resulted after the agreed-upon number of days for the supplemental agreement.

(Tr. II/66-68)

Mr. Lloyd was questioned about his analysis and whether it included changes to Bay's original sequencing. He answered that based on his conversations with CO Prescott he had used start dates of January 10, 1996 for mobilization and January 19th for demolition. When asked whether he had created an "after-the-fact original schedule," he admitted that he had, by taking the "historical aspects of the project, as well as the documents as a total." He also recognized several other events, which if they had occurred during the Contract, would also have impacted his analysis. (Tr. III/194-97, 202-45)

On Bay's loss of productivity/disruption claim, Mr. Kim concluded "[a]s I went in [Bay's] exhibits, we can see that work was performed out of sequence, work was done piecemeal, et cetera." Referring to the "original schedule" he testified:

A For example, because of the delays that I previously mentioned, a lot of those resulted in supplemental agreements. If we take an item such as “paint wall to ceiling,” which is identified probably about 10 items down, we can see that Bay originally anticipated to do the work here.

Q Which is when?

A April -- I believe it was April 3rd, 4th, 5th, and 6th. And to be all performed at one time. As a result of the disruption caused by the supplemental agreement, et cetera, we can see that the work was done piecemeal here and there, here and there.

Furthermore, we can see that the original sequenced activity is not reflected in the -- if we look at the actual work sequence, we see some things flip-flopped. Whereas we may have -- let me pull an example out here.

* * * * *

If we look at, for example, frame wall versus rough plumbing, we had intended to do frame wall. We intended to start rough plumbing, and in the midst of rough plumbing, we intended to start frame wall work. Whereas, in actuality what actually occurred is we had to start frame wall work and then we went to rough plumbing work. So we see a change in sequence.

(Tr. II/179-83; R4, tab 51)

Mr. Kim did not prepare the original claim submission using what Appellant referred to as the “measured mile” method; however, he worked on later calculations related to Bay’s claim for loss of productivity. (Tr. II/209; R4, tab 10; R4 Supp., tab 23) He defined disruption as “anything that prevents the contractor . . . changes the contractor’s intended method of performance, [or] prevents him from doing what he originally anticipated doing in the manner he

originally wanted to [D]isruption often causes the sequence to be shifted, therefore making work being performed out of sequence,” and based his opinion as to the Government caused disruption on his critical path analysis. (Tr. II/179, 209; R4, tab 10; R4 Supp., tab 23)

Mr. Kim stated that one of the methods used to measure the impact of disruption was “an industry standard or a Means estimate [Means Estimating Guide],” taking the “should cost” method and applying productivity rates from an industry standard such as Means. He claimed he used that method to do his analysis that shows \$62,777.30 in lost productivity. He used “a Means book to calculate the amount of the cost for purposes of lost productivity,” and it appeared to him that the amount of time specified in the Means book usually was always less than the durations that Mr. Doerr specified in his schedule. His lost productivity analysis applied what he called “a shift cost estimate” that incorporated the “industry standard method,” to calculate \$62,777.30 in lost productivity. Bay’s original lost productivity claim used what it asserted was a “measured mile calculation” to arrive at \$67,637.86 in damages. Bay modified that original claim downward to \$50,194. (Tr. II/141, 191, 193-99, 207-09; R4, tab 10; R4 Supp., tabs 22, 23)

When asked to describe the manner in which Bay’s performance was disrupted, Mr. Kim referred to his critical path analysis chart and testified that he could see work was “done piecemeal” and “performed out of sequence.” He pointed to work that Bay anticipated doing “all at one time” on a particular date and concluded that “as a result of the disruption caused by the supplemental agreement . . . we can see that the work was done piecemeal here and there, here and there.” He noted instances where the actual work sequence “flip-flopped” or there was a “change in sequence.” Some of the effects of disruption, he opined, might include a loss of momentum and a loss of efficiency. He also

referred to a “flattening of the learning curve,” and he pointed to areas of his analysis, such as the med-gas work that he said showed a loss of efficiency and “sporadic” work. He concluded “[a]s we can see, because of the effect of the delays, the base line schedule does not compare to the master chart. . . [w]hereas certain tasks were scheduled to be completed prior to others, because of these delays, those time frames were extended and required Bay to do this work and then go back -- do one work and then go back to the other, out of sequence.” (Tr. II/179-189; R4 Supp., tabs 11 and 51)

Robert L. Clontz, Director of VA’s Claims and Risk Management Office, addressed Bay’s lost productivity claim. Mr. Clontz has 20 to 25 years of experience reviewing loss of productivity claims and supervises a staff that includes five schedulers and claims analysts. He reviewed Bay’s initial lost productivity submission and its revised submission. (Tr. III/265; R4, tab 10) In his April 21, 1998 written analysis addressing Bay’s original submission, Mr. Clontz noted several discrepancies:

The loss of productivity analysis presented by the contractor has many errors and does not clearly tie the alleged lost productivity to government actions or inactions. It makes assumptions as if grounded in facts and then arrives at conclusions which are not supported by project records or documents.

Therefore, our review of the Contractor’s loss of productivity analysis finds that the Contractor has not clearly demonstrated that the government is liable for any alleged productivity losses. In addition, the Contractor’s analysis lacks credibility and is not convincing in it’s attempt to present his alleged losses.

The analysis presented is not a “measured mile” as represented.

(R4, tab 41A)

At hearing, Mr. Clontz testified about deficiencies his review of Bay’s original application of the “measured mile” method revealed:

It’s represented as being a measured mile analysis. When you get into it, it really doesn’t do what would normally be considered a classic measured mile analysis. There are several -- besides the numerical problems I found with it and cited in my review, which were documented in my letter, the -- there’s basically things that as far as the measured mile analysis that appear with it. One of them is that the -- in a measured -- a classical measured mile analysis, you separate the different trades that are being -- going to be studied. And you separate those trades and determine periods on the job when those trades have periods of performance when they have not been impacted by the alleged government-caused changes or impacts.

And then you compare similar work of that same trade during the alleged or impacted period by the government. And then you compare those two on an hourly basis, and compare the productivity during the period when the trade was impacted by the changes or the government impacts -- whatever they were -- to the period that’s unimpacted. And that gives you a percentage of lost productivity when you do the ratio between the impacted period divided by the productivity per hour during the unimpacted period.

And this analysis doesn’t attempt to do that at all. It doesn’t separate the trades out. It also doesn’t identify the impacted period to any definite government-caused change. It just assumes that the lowest productivity period that they cite through their calculations -- right or wrong -- is the non-impacted period. They don’t tie that

period back to when whatever the government-caused change or government-caused impact was going on.

And so there's no connection between not only the trades being separated, but there's no connection between the period when the -- what caused the -- what period of time during the contract or during the installation of the work, what government cause caused it during what time frame and what work was being done and exactly what trades were being involved. So there's no real comparison. There's no ties that I see there that's been separated to make it a valid lost productivity analysis.

The analysis they presented, as I can tell, mixes both carpenter and laborer trades. It does not separate them out. And it doesn't really indicate the impacted periods.

I found a number of numerical problems in their presentation and analysis. If I could pull out my notes, I could reiterate those. They're in my written analysis. I assume that's been included in the record or not.

(Tr. III/265-68)

Mr. Clontz mentioned several items that would typically be represented in a disruption analysis but were lacking in Bay's analysis. It was his opinion that the base numbers Bay used in its analysis were nothing more than estimates, and were not even represented as the original bid estimates for the work. He determined that a credible lost productivity analysis would be based on actual costs instead of estimated costs, particularly since Bay's lost productivity analysis was performed after Bay was no longer performing Contract work. He also characterized the revised lost productivity analysis prepared by Mr. Kim as an "updated summary of the previous one" in which Mr. Kim made "some adjustments." He opined that second submission had "the same basic problems" as the prior analysis, and was not a "true" measured mile analysis. He

ultimately concluded that neither of Bay's lost productivity submissions was "based on sound facts or properly presented to have credibility." Stating that he "did not really have the documentation to do a separate analysis of the lost productivity," Mr. Clontz indicated that he had not done his own analysis of whether Bay had suffered a loss in productivity. Comprehensive documentation regarding Bay's labor hour budget and actual labor expenditures is not contained in the record. (Tr. III/270, 274-82; R4 Supp., tab 23)

DISCUSSION

The appeals before us arise out of several claims for which the Appellant seeks the balance due on the work it says it completed (VABCA-5594 and 5831), direct labor costs associated with an extended performance period (VABCA-5625), unabsorbed home office overhead (VABCA-5526), and loss of productivity/disruption (VABCA-5528). After an extended period of back and forth charges of delays, the parties terminated the Contract via an Agreement executed on March 6, 1997. A few weeks after signing the Agreement, the Contractor submitted these claims. Unfortunately, the March 6th Agreement did not clearly address the scope of the Contract work that was completed or identify what requests for adjustment and/or claims would be considered. Upon submission of these claims, the VA challenged Bay's entitlement and calculations charging that the Contractor had already been fully paid for all the work it completed and that it "has been extremely creative" in constructing its claims even though all the Phase I work was not completed.

We note at the outset of this discussion that the Government belatedly asserted the affirmative defense of release arguing the March 6 Agreement precluded Bay from asserting new, previously unidentified claims. No mention of this defense was made in the Government's pleadings, and it surfaced for the

first time in Government's Post-hearing Reply Brief. Board Rule 6 requires the Government to raise affirmative defenses in its Answer. Rule 6(2), 38 C.F.R. § 1.783 (f). Federal Rules of Civil Procedure, Rule 8(c) requires similar notice, and we look to the Federal Rules for guidance to assist in the resolution of procedural problems. See Fed.R.Civ.P. 8(c); *Dawson Construction Company, Inc.*, VABCA No. 1967, 85-2 BCA ¶ 18,209; *Unicon Management Corporation*, VABCA No. 515, 68-2 BCA ¶ 7,198. While our Board has allowed the late submission of the affirmative defense of release where an opposing party receives adequate notice and an opportunity to defend, the pleadings and record reveal that Bay did not receive adequate notice and an opportunity to defend so we are not willing to favorably consider this defense. See *Fletcher & Sons, Inc.*, VABCA No. 3248, 92-1 BCA ¶ 24,726; *N & P Construction Co., Inc.*, VABCA Nos. 2578, *et al.*, 92-1 BCA ¶ 24,447. We took the Agreement into our deliberations as discussed below.

When the facts and circumstances of this Contract, the March 6 Agreement, and the disputes that have arisen are fully considered, we are faced with considering neither a "no cost settlement" nor a "Termination for the Convenience of the Government." Notwithstanding the fact that the VA and Appellant executed the Agreement providing that, "[i]n return for the Contractor agreeing to a no cost settlement (Termination for Convenience) the VA will not seek a Termination for Default," a subsequent paragraph of that same Agreement acknowledged, "[a]ll requests for contract adjustment and or claims related to Phase I of the Contract remain in force." At the time the Agreement was executed there were no outstanding requests for adjustment or claims, as such, pending before the CO. The Bay claims were fully considered by the CO, who awarded equitable adjustments on some of them. It was only much later, during briefing, that the Government argued the claims were precluded by the Agreement.

The Federal Acquisition Regulation (FAR) instructs contracting officers they shall execute a “no-cost settlement agreement if (a) the contractor has not incurred costs for the terminated portion of the contract or (b) the contractor is willing to waive the costs incurred and (c) no amounts are due the Government under the contract.” 48 CFR 49.109-4 (1997 edition). The CO did not include in the Agreement the required FAR waiver language, and Bay did not specifically waive its right to claims related to Phase I work. 48 CFR 49.603-6, 49.109-4 (1997 edition).

Upon carefully reviewing the entire March 6 Agreement and the rest of the record presented, it is clear to us that, to the extent Bay was able to prove changes had occurred and resulted in damages, the VA anticipated providing equitable adjustments for those changes and payments for the work it felt was properly completed, due and owing -- even post-Agreement. While perhaps not anticipated by the Government, and certainly not specifically articulated in the Agreement, to some degree such changes could include delay, inefficiency and disruption. The VA indicated in testimony throughout the hearing that had it received certain proper documentation, it would have been willing to make various additional adjustments to the payments it had made to Bay. The CO, in his final decision, allowed that Bay was entitled to compensation for 77 days of delay. In light of this testimony and actions of the parties, this interpretation of the Agreement is apparent. We conclude that what we have before us is a supplemental agreement wherein the parties agreed to end their contractual relationship and the Contractor would be paid for work performed in Phase I, including changes. Those changes could include suspensions, disruption and the other claims currently before us in these appeals that we have addressed below.

The Appellant called Mr. Kim, a Bay project manager, as its primary witness, and most of its arguments are premised on the opinions and estimates

provided by Mr. Kim. We note at the outset of this discussion that the Appellant failed to elicit the testimony of Mr. Doerr, who had actual knowledge of how this project was planned, scheduled, or staffed; Mr. Yu, who supervised on-site work during the project; or, Mr. Lee, who as one of Bay's owners, managed the VA project, and interfaced with the VA. Bay also failed to call any witnesses who had interacted with CO Prescott or COTR Katanics, who were present throughout this Contract and who raised various concerns about Bay's lack of progress. Essentially, Bay failed to produce any witnesses who actually knew or understood what was happening at the time Phase I work was being performed. In these circumstances, we drew the negative inference that, if so questioned, those witnesses would not have provided testimony helpful to the Appellant and would not have substantiated these claims. *Centex Bateson Construction Co.*, VABCA Nos. 4613, 5162-5165, 99-1 BCA ¶ 30,153 at 149,258, *aff'd*, *Centex Bateson Construction Co. v. West*, 250 F.3d 761 (Fed. Cir. 2000); *Dawson Construction Company, Inc.*, VABCA Nos. 3306, *et al.*, 93-3 BCA ¶ 26,177, *aff'd sub nom Dawson Construction Company v. Brown*, 34 F.3d 1080 (Fed. Cir. 1994) (Table); *Blount, Inc.*, VABCA No. 3236, 93-1 BCA ¶ 25,474.

In VABCA-5594 and 5831, Appellant seeks the value of, or balance due, on the work it completed associated with Phase I. It bases these claims on what it says is the price that should be attributed to the Phase I work it says it completed. To recover the sums sought, the burden is placed squarely upon Bay to establish each element of liability and any resultant damages or quantum. *Conner Brothers Construction Co.*, VABCA No. 2519, 95-1 BCA ¶ 27,409 at 162,034 *citing Wilner v. United States*, 24 F.3d 1397 (Fed. Cir. 1994); *Assurance Co. v. United States*, 813 F.2d 1202 (Fed. Cir. 1987).

In its claims for the "value of" or "balance due" Bay bears the fundamental burden of establishing its entitlement for the Contract work it completed, above

and beyond the amounts it has already been paid. *Jen-Beck Associates*, VABCA No. 2107, 87-2 BCA ¶ 19,831; *Dawson Construction Company, Inc.*, VABCA Nos. 2000, 2016, 86-3 BCA ¶ 19,322; *Wunderlich Contracting Co. v. United States*, 351 F.2d 956 (Ct. Cl. 1965). Notwithstanding the fact that the Appellant expressed these claims in terms of the “value of” and “balances due” for completed work, these appeals are not based on simple claims to recover the Contract price pursuant to a schedule of values applied to the work completed. This Contract was bid and awarded as a base contract and three additives. Performance of the work was required to occur in phases, with Phase I work comprising a portion of the base Contract amount and Additive 3. Thus, the price of the Phase I work is not readily apparent from the schedule of values, and turned out not to be a simple or precise formulation for the Contractor, the Government, or for us. Also, we were unable to deduce from the record what it actually cost Bay to bring Phase I to the degree it was completed when the Contract was terminated.

Mr. Kim calculated the value of the Phase I work to constitute 52% of Bay’s original estimate of the base contract amount. It was his “overall conclusion” that Bay completed “virtually all” of the Phase I work. He also adjusted Bay’s base bid amount by moving what was originally priced as Phase II work into Phase I to correct what he termed as a bid “misclassification” on the value of the HVAC subcontractor work. Then he applied varying methodologies, which he termed the “deductive approach” and the “additive approach,” to reach a figure for the value he says should be placed on Phase I work.

Bay called no witnesses who were familiar with the work performed or who could credibly testify about the payments it received, and did not present sufficient evidence to rebut Government’s proof that, via the progress payments, it already fully compensated Bay for the work it completed. We were not persuaded by Mr. Kim’s estimates, methodologies and conclusions. The factual

bases supporting Appellant's claims, and the machinations it went through to apply its calculation methodologies, fall far short of any probative evidence or recognizable cost calculation method that we require as proof for such claims. On the other hand, the Government provided documentary evidence of incomplete work and we heard testimony from both the CO and COTR about the state of the completion of Phase I work. The CO and COTR administered this Contract from its inception. The COTR was the only witness called who had a daily presence on the project site. He reviewed the work completed on a regular basis and applied it to Bay's schedule of values for purposes of payment. He heard no complaint from Bay on the progress payments as they were made. It was only after the Agreement was executed that a payment dispute arose. Based on the record before us, calculations of the price for the completed Phase I work is most reliably accomplished using the payment record and testimony of the COTR who was the only witness that viewed the project on a daily basis, assessed the value of completed work and regularly, as work was completed, made appropriate progress payments to Bay.

Our review of the payment records reveals that the Appellant was fully paid for all the work it completed in Phase I, including retainage and work performed pursuant to the supplemental agreements. Also, while Appellant made various assertions that it was not paid for work performed in January and February 1997, and for work related to the medical gas testing, we saw nothing in the record proving Bay either incurred or was entitled to recover these costs. Bay failed to establish that there is any balance due it for Phase I work and its appeals in this regard are denied.

Referring to changes and differing site conditions, Bay contends that it experienced 304 days of Government-caused delay and suspension that extended the Contract performance time. The Appellant argues that under the Contract's

SUSPENSION OF WORK clause it should receive additional compensation above and beyond the monies it received pursuant to the VA CHANGES Clause. In VABCA-5625, Appellant seeks additional direct labor costs for the extended performance period and in VABCA-5526, claims unabsorbed home office overhead (Eichleay) for the 304 days of Government-caused delay and suspension to its critical path. The Government avers that any delays or suspensions that occurred on the project were associated with the performance of changes for which Bay was fully compensated under the VA CHANGES clause. The Government also denies that it suspended Bay and argues the Appellant has failed to prove its claims by a preponderance of the evidence. That being said, the Government offered its time analysis and testimony on suspension, asserting that 78 calendar days of delay associated with change orders and 28 days of suspension time occurred in this Contract, and averring that, while Bay failed to prove entitlement, according to the VA's analysis, the most Appellant could possibly be entitled to would be 92 days of delay compensable under the SUSPENSION OF WORK clause.

We note at the outset of this discussion that, even though the final decision considered the Contractor's claim and concluded that Bay was entitled to \$11,242 for its delay, disruption and inefficiency claims, we consider Bay's appeal of the final decision *de novo*. Consequently, the VA's position evidenced in the final decision does not bind us. *Assurance Company v. United States*, 813 F.2d 1202, 1206 (Fed. Cir. 1987); *Sefco Constructors*, VABCA Nos. 2748, 3730, 93-1 BCA ¶ 25,458, *Jen-Beck Associates*, at 100,322; *Sentry Insurance*, VABCA No. 2617, 91-3 BCA ¶ 24,094; *Long Elevator & Machine Co., Inc.*, VABCA No. 2246, 90-2 BCA ¶ 22,637.

In various instances during these proceedings, the Appellant used the terms "delay" and "suspension" interchangeably. In as much as it has sought

recovery under the SUSPENSION OF WORK clause, having already received equitable adjustments pursuant to the Contract's CHANGES clause, we have analyzed Bay's claims as ones for suspension. The Contract's SUSPENSION OF WORK clause is the only remedy-granting clause available to Bay for relief. We have on several occasions discussed the limitations placed on contractors' recovery by the VA CHANGES clause and what contractors, like Bay here, must prove in order to recover pursuant to the SUSPENSION OF WORK clause. To establish its entitlement to an equitable adjustment under the SUSPENSION OF WORK clause, Bay must meet a four-part test. We recently recounted this test in *P J. Dick Incorporated* as:

First there must be a delay of unreasonable length extending the Contract completion time. Second, the delay must have been proximately caused by the VA's action or inaction. Third, the delay resulted in some injury and fourth, there is no delay concurrent with the suspension that is the fault of [the contractor]. FAR 52.212-12; *Laburnum Construction Corp. v. United States*, 325 F.2d 451 (Ct. Cl. 1963); *C & D Lumber*, VABCA Nos. 2877, *et al.*, 91-1 BCA ¶ 23,544; *J.D. Hedin Construction Co., Inc. v. United States*, 347 F.2d 235, 246-47 (Ct. Cl. 1965); *Merritt-Chapman & Scott Corp. v. United States*, 528 F.2d 1392, 1397 (Ct. Cl. 1976); *Dawson Construction Company, Inc.*, VABCA Nos. 3306, *et al.*, 93-3 BCA ¶ 26,177; *Wunderlich Contracting Company v. United States*, 351 F.2d 956, 967 (Ct. Cl. 1965).

VABCA Nos. 5597 *et al.*, 01-2 BCA ¶ 31,647, 2001 WL 1219552, at *47-48.

In *Dawson Construction Company, Inc.*, we held that a contractor must, by a preponderance of the evidence, show that the contract performance period was extended and that unreasonable Government conduct was the sole proximate cause of the extended performance:

Appellant must first show that there was a delay and that it was of an “unreasonable length of time.” Of course, where the delay is the result of defective specifications all delay time will be regarded as “unreasonable.” Second, the delay must have been proximately caused by the Government’s action or inaction. Third, Appellant must show that the delay resulted in some injury. Fourth, and perhaps most crucial in the appeals before us, Appellant must show that the VA was the “sole proximate cause” of the delay and that there are no concurrent delays, which absent a “clear apportionment,” will defeat any recovery.

VABCA Nos. 3306 *et al.*, 93-3 BCA ¶ 26,177 at 162,327-329.

Thus, to recover extended field and home office overhead under the SUSPENSION OF WORK clause, there must be some action by the Government which extended a contractor’s performance for an unreasonable period. Where the Government, pursuant to its contract right, orders routine changes in a timely manner, it has not acted unreasonably within the SUSPENSION OF WORK clause, notwithstanding the fact that the change order may have also impacted some unchanged work. *Id.* Appellant need not show a Government-ordered work stoppage to recover under the SUSPENSION OF WORK clause. If the delay is a result of some Government act or failure to act, it may be considered a “constructive suspension” of work for purposes of the clause. *John A. Johnson & Sons, Inc. v. United States*, 180 Ct. Cl. 969, 984-85 (1967); *Fire Security Systems, Inc.*, VABCA No. 3086, 91-2 BCA ¶ 23,743 at 118,896-97. A constructive suspension of work can occur when there is no order to suspend work by a contracting officer but the work is stopped and the Government is responsible for the stoppage. *Fire Security Systems, Inc.*, VABCA No. 3086, 91-2 BCA ¶ 23,743 citing *CRF v. United States*, 624 F.2d 1054 (Ct. Cl. 1980); FAR 52.249-

10(b)(2). Also, to recover under the SUSPENSION OF WORK clause, a contractor must be able to distinguish between alleged suspension and change order time, including discrete periods of delay to the critical path preceding change work, the time required to do change work, and the impact that a change may have on unchanged work. *Coates Industrial Piping, Inc.*, VABCA No. 5412, 99-2 BCA ¶ 30,479, at 7,744; *P.J. Dick Contracting, Inc.*, VABCA Nos. 3386, 3387-97, 92-1 BCA ¶ 24,599, at 122,728; *Dawson Construction Company*, VABCA Nos. 3306-3310, 93-3 BCA ¶ 26,177, at 130,314.

Bay argues that, due to delays and suspensions relating to roadwork, asbestos, OR #1, wall framing, rough plumbing and electrical, the modular head wall, hardware for No. 9 door, medical gas, and floor leveling, it experienced 182 days of delay to its critical path preceding the cited events, 171 days of critical path delay subsequent to the events, and that it took 11 days to actually do the work associated with the events. To meet its burden, Appellant elected to rely on the written record and the schedules and charts created by individuals not testifying at the hearing. It also relied primarily on the analysis and testimony of Mr. Kim, to which the Board does not give great weight. On the issue of delay or suspension we did not find Mr. Kim a compelling witness. Mr. Kim had some general construction experience and had performed a variety of construction functions, one of which was scheduling. However, it is unclear how much on-site experience he had, and, if he worked on the VA project site at all, it was minimal. No Bay witnesses were called who were familiar with the work site or how the work actually progressed.

Mr. Kim attempted to prove Government-caused suspension by recreating the job progress using the documentary information available to him in the form of daily logs and correspondence, and inputting that information into a computer scheduling program. He based his "as-built" time analysis and

testimony on uncorroborated assumptions about how the project was originally planned and performed, and at times his testimony was largely conjectural. His reference to his time analysis being a “CPM analysis” is inaccurate, possibly due to his own lack of experience. His analysis is unlike any CPM analysis with which we are familiar. Bay neither was required to, nor used, the critical path method [CPM] to schedule or maintain schedules for this project. Mr. Kim used a computer program to generate his chart showing supposed delays to the critical path. However, he did not generate a “CPM analysis”. We found his analysis to be more in the form of bar charts that we have previously held are ordinarily incapable of providing the standard of proof required to establish delays and impacts on a project. *Coates Industrial Piping, Inc.*, VABCA No. 5412, 99-2 BCA ¶ 30,479 citing *H.W. Detailer Co., Inc.*, ASBCA No. 35327, 88-2 BCA ¶ 21,612.

The validity and approval of Bay’s original schedule, as well as Bay’s projected staffing for the project, was not satisfactorily established. Mr. Kim determined that Mr. Doerr, whom he believed had created the original schedule, had properly planned and staffed the VA project. He deduced that the schedule had been approved by the VA and was reasonable. He believed that Mr. Yu saw the project documents and prepared the undated and unsigned chart on which he based his testimony at the hearing. However, we did not find sufficient reliable factual information in the record to support his conclusions. There was neither comprehensive nor convincing evidence regarding Bay’s schedule submission(s), contents or approval dates. The record did not contain updated schedules reflecting what was happening at the time the delay triggering events allegedly occurred or reflecting the schedule being modified to mitigate delays. The record deficiencies are noted regarding Bay’s submittals.

Mr. Kim also attributed all of Bay's time loss and extended performance time to Government changes, delays and suspensions. He ignored or casually dismissed any reference to Bay's small crews and lack of progress, and did not appropriately consider any information that was unfavorable to the Appellant. That Bay was behind schedule was observed by the COTR and noted in almost every monthly progress payment report. Yet, Mr. Kim downplayed these observations and concluded that his analysis showed the various Bay-caused factors raised by the Government did not in any way impact the critical path. The Appellant did not effectively address various discrepancies in the daily logs and failed to prove several of the key facts upon which it based its case. No subcontractors, who performed significant amounts of the actual work on the job, were called to testify about Government caused delays, and there is no indication any of those subcontractors presented delay or suspension claims.

Bay also failed to establish that it exercised diligence in making its submittals, or that it could have met its planned Phase I schedule with its anticipated project staffing. The daily logs show that Bay's project crews were consistently small and that it greatly relied on subcontractors to perform much of the actual day-to-day work. The Appellant failed to convincingly address the questions raised about its inadequate staffing and failure to make progress, and how those issues related to any Government caused delays that it said occurred. Bay clearly bore some responsibility for the extended performance period, but, on the basis of the evidence before us, we were unable to determine how much of the time was due to Bay deficiencies and how much was due solely to Government delays, suspension, changes, actions or inactions. Bay must account for its own delays, and its failure to acknowledge and factor them into its analysis made its analysis flawed, and its purported critical path analysis unreliable. It failed to show by a preponderance of the evidence that Phase I

activities were delayed and suspended solely to Government conduct, and did not meet its burden of proving that it could have and would have completed its schedule but for Government-caused delays and suspensions. *Wickham Contracting Company v. Fischer*, 12 F.3d 1574, 1581-82 (Fed. Cir. 1984); *Hensel Phelps Construction Co.*, ASBCA No. 49270, 99-2 BCA ¶ 30,531.

In all, Appellant's analysis was premised on many unconfirmed fundamental assumptions that it attempted to prove through the largely conjectural and prompted testimony of an insufficient witness. The charts Appellant generated and used at hearing, and Mr. Kim's testimony, did not convince us that Bay suffered a suspension that would be compensable under the Contract's SUSPENSION OF WORK clause. Given the record before us, Mr. Kim's readiness to assume only facts favorable to Bay and his equal willingness to negate Bay's culpability for delays made his analysis neither probative nor his opinions convincing. Bay presented little credible evidence connecting suspension time sought to particular Government-caused events. Bay's unsupported generalizations attributing the excessive time taken to perform the Contract work totally to Government caused delay and suspension cannot be substituted for the probative evidence necessary to sustain Appellant's burden. *Dawson*, 93-3 BCA ¶ 26,177, at 162,328 citing *WRB Corporation v. United States*, 183 Ct. Cl. 409, 427 (1968).

As we generally observed in *Dawson*:

The schedule's logic was not fully revised and updated to reflect actual construction or what was, in fact, critical. Change order work was not properly inserted into the CPM network as required. The usefulness of a CPM is dependent on the "extent to which it is employed in an accurate and consistent manner to comport with the events actually occurring on the job."

Moreover, rather than follow the approved CPM, the Contractor operated from what its attorney termed [its] “internal optimistic schedule” which planned for completion of Phase 3 in 18 rather than 24 months. This schedule was neither provided to the Government or to the Board and hence its reasonableness is difficult to judge. Additionally, weekly meetings with subcontractors resulted in considerable schedule changes that, apart from isolated examples, also have not been provided to the Board. Failure to provide such information permits the Board to draw an inference that it may not support Appellant’s contentions. Also, conspicuous by its absence was any testimony from the CPM scheduling firm which was hired by the Appellant to create its schedule and which was utilized throughout the project to adjust the schedule for changes and logic revisions. In sum, we have neither an accurate “as planned” nor “as built” CPM.

The inadequate CPM data also diminished the value of the expert witnesses who testified at the hearing. More often than not, the Board was presented with unhelpful “bottom line” opinions that something did or did not delay the project. And, the Board was not impressed by references to bar charts submitted for the hearing, which, by their very nature, provided “minimal if any insight into the relationship between various operations or their proper coordination.”

93-3 BCA ¶ 26,177 at 162,328 (citations omitted).

The difficulty of our task was compounded by the fact that the opposing parties presented us with two irreconcilable time analyses. We also found the Government’s time analysis to be of little value. Mr. Lloyd’s analysis is questionable because he appears to have used incorrect start dates based on conversations with CO Prescott. That analysis also presented an incomplete picture of what actually happened on this project. It was based on only a limited

review of the Contract documents and unverified discussions with VA staff. The results of Mr. Lloyd's later analysis in which he concluded there were 78 calendar days of delay associated with change orders and 28 days of suspension time differed from an earlier version where he concluded there were 77 days of "work stoppages." On the whole, we found both Government time analyses cursory in nature, and in several instances, related testimony confusing and circuitous.

We conclude that the testimony and opinions of Messrs. Kim and Lloyd did not add much value to their respective cases. As we stated in *Dawson*:

Expert opinions offered on certain matters that clearly are not supported by the record tended to cast a shadow on the value of other opinions concerning issues where underlying factual matters were less clear.

Testimony was of particular value to the Board to the extent that the witnesses were familiar with the daily logs and other voluminous documentary evidence that constitutes the record in these appeals. For both expert and other witnesses there seemed too often to be an inverse relationship between the certainty of opinion and the specificity of detail. The more general and vague the proposition, the more certain the witnesses were. As our Board observed in *Preston-Brady Co. Inc.*, VABCA No. 1849R, 88-1 BCA ¶ 20,260 at 102,541:

"In all too many instances, the testimony given at the hearing by Appellant's witnesses was of a general nature, lacking the specifics required to support its various arguments concerning delay to overall job progress. Because of this, the Board was forced to independently examine the drawings and logs to attempt to understand just how this generalized

testimony related to lack of forward progress.”

93-3 BCA ¶ 26,177, at 162,328-29.

In litigation, we are often faced with purported opinion witnesses and experts representing conflicting viewpoints, where as the fact finder and judge, we must choose between their positions and conclusions. *Burlington Northern, Inc. v. United States*, 676 F.2d 566, 577-78 (Ct. Cl. 1982); *Santa Fe Engineers, Inc.*, ASBCA Nos. 27933, 28682, 85-2 BCA ¶ 18,001; *William F. Klingensmith, Inc.*, GSBCA No. 5523, 83-2 BCA ¶ 16,855, *aff'd* 765 F.2d 158 (table) (Fed. Cir. 1985); *Maitland Brothers Construction Company*, ASBCA No. 24476, 86-3 BCA ¶ 19,172. However, even uncontroverted opinion evidence is not conclusive if it is intrinsically non-persuasive. *Sternberger v. United States*, 401 F.2d 1012 (Ct. Cl. 1968). In this “battle” of purported experts representing conflicting viewpoints, we found there were no clear winners. Taking the evidence as a whole, including Messrs. Kim’s and Lloyd’s time analyses, testimony and opinions, Appellant failed to prove by a preponderance of the evidence any particular time during the Contract where Bay suffered compensable suspension of work solely attributable to the Government’s actions or inactions, for which it should receive additional compensation. Appellant is not entitled to additional direct labor costs (VABCA-5625) or unabsorbed home office overhead (Eichleay) (VABCA-5526) pursuant to the Contract’s SUSPENSION OF WORK clause. Bay is not entitled to its claimed damages for a variety of other reasons that we will touch on briefly as well.

In addition to its lack of success in proving that suspensions of work actually occurred, the Appellant also failed to prove the suspensions it claimed were unreasonable. By not addressing the reasonableness of the alleged suspension periods, Bay appears to erroneously assume that any suspension

period was *per se* unreasonable. For a contractor to recover under the SUSPENSION OF WORK clause the Government-caused delay must be unreasonable. We have in certain circumstances, such as where delay or suspension was caused by defective specifications or drawings, found the delay or suspension to be *per se* unreasonable. *Fire Security Systems, Inc.*, VABCA No. 3086, 91-2 BCA ¶ 23,743; *Clover Builders, Inc.*, VABCA Nos. 2033, 2035, 88-2 BCA ¶ 20,629.

Bay, however, failed to present evidence or argument addressing the unreasonableness of the alleged suspensions, choosing instead to assume that any and all suspension it claimed occurred was “inherently” unreasonable. Even had Bay proven suspension of work occurred in this Contract, it is unlikely on this record that we would be prepared to conclude that any or all of that suspension was *per se* unreasonable. *Concrete Placing Company, Inc.*, ASBCA No. 52614, 01-2 BCA ¶ 31,625; *Elter, S.A.*, ASBCA No. 52451, 01-BCA ¶ 31,373. So, even had Bay established a period of suspension, its appeals would fail because it did not prove that the delay or suspension associated with the event was in fact “unreasonable.”

Relying on an extended performance period and the Contract’s SUSPENSION OF WORK clause as bases of recovery, Bay also asserted in VABCA-5625 that it was entitled to recover \$51,087 in direct costs for the salaries of Mr. Doerr (\$25,140 incurred in 1996) and Mr. Yu (\$25,947 incurred in 1996 and 1997). Both Messrs. Doerr and Yu were carried Bay’s payrolls as salaried employees during the Contract, including pay periods from April 12, 1996 through February 24, 1997. This period corresponds to the 304 days that Appellant contends it incurred compensable delay.

The VA CHANGES Clause contained in the Contract limits Bay’s right to claim these salaries by providing that: “[o]verhead and contractor’s fee

percentages shall be considered to include insurance other than mentioned herein, field and office supervisors and assistants.” As both Messrs. Doerr and Yu were carried on Bay’s payrolls as salaried employees their time is not compensable as a direct cost, but is treated as an overhead cost and compensated via the percentage overhead rate provided under the changes. *Sefco Constructors*, VABCA No. 2747, 93-1 BCA ¶ 25,458; *Shumate Constructors, Inc.*, VABCA No. 2772, 90-3 BCA ¶ 22,946; *KAM Electrical Enterprises*, VABCA No. 2492, 89-1 BCA ¶ 21,558.

Having concluded earlier in this discussion that Bay failed to prove its appeals under the SUSPENSION OF WORK clause, we will not fully discuss whether the “direct” cost of daily field overhead expenses it seeks could be compensable as “impact” costs or whether the language of the SAs barred Bay’s recovery for any additional costs other than “impact” costs on unchanged work. *See Warbonnet Electric, Inc.*, VABCA Nos. 3731, *et al.*, 96-1 BCA ¶ 27,938. We note only that had Bay been able to prove discrete periods of unreasonable delay or suspension, it may have been entitled to recover daily field overhead expenses as direct costs under the SUSPENSION OF WORK clause. *P. J. Dick*, 2001 WL 1219552, at *51-52.

Regarding Appellant’s claim for indirect home office overhead expenses, in *P. J. Dick*, we recently had the opportunity to review Federal Circuit treatment of the circumstances under which an Eichleay recovery may be made. We concluded:

The Court has made it clear that, in order to recover Eichleay costs, a contractor must meet two tests. First, a contractor must be on “standby”; in other words, the contractor’s work on a project must be suspended for an uncertain duration due to a SOW [Suspension of Work] and the contractor can be required to return to work immediately at any time. The second test that must be

met is that the contractor was unable to take on other “replacement” work during the period from the beginning of the suspension to the end of the contract. *All State Boiler, Inc. v. West*, 146 F.3d 1368, 1373; *Melka Marine, Inc. v. United States*, 187 F.3d 1370 (Fed. Cir. 1999).

P. J. Dick, 2001 WL 1219552, at *50.

We find that the Appellant wholly failed to address a critical element for recovery of unabsorbed home office overhead or “Eichleay” damages, that being, it was forced it to be on “standby” because of Government caused delay and suspension. Other than Mr. Kim’s prompted and ungrounded conclusion that Bay did not know “the actual duration of the delays or when they would end . . . it would be impossible to determine – to calculate when this job would end, and thereby, be able to get another project,” we heard nothing about Bay being on “standby.” Even if we had found delay and suspension had occurred, Bay would still not be entitled to recover Eichleay damages because it failed to establish that it was on “standby.”

In VABCA-5528, Bay claims the Government caused a loss of efficiency and disruption. Loss of productivity or disruption has been defined as the “increased cost of performance caused by a change in the contractor’s anticipated or planned working conditions, resources, or manner of performing its work.” Michael R. Finke, *Claims for Construction Productivity Losses*, 26 PUB. CONT. L.J. 311, 313 (1997). Productivity can be affected by many factors that disrupt the efficient performance of work, including multiple changes, interference, delays, alterations in sequencing, suspension and acceleration. These factors may cause a contractor to reassign workers, stack trades and perform work out of sequence, ultimately causing lost productivity and an increase of labor costs. *Id.* at 313-15.

A contractor seeking to recover for the impact costs of numerous changes on unchanged work must prove three essential elements: liability, causation, and resultant injury. *Centex Bateson Construction Co.*, VABCA Nos. 4613, 5162-5165, 99-1 BCA ¶ 30,153 at 149,258, *aff'd*, *Centex Bateson Construction Co. v. West*, 250 F.3d 761 (Fed. Cir. 2000).

Impact costs are additional costs occurring as a result of the loss of productivity; loss of productivity is also termed inefficiency. Thus, impact costs are simply increased labor costs that stem from the disruption to labor productivity resulting from a change in working conditions caused by a contract change. Productivity is inversely proportional to the man-hours necessary to produce a given unit of product. As is self-evident, if productivity declines the number of man-hours of labor to produce a given task will increase. If the number of man-hours increases, labor costs obviously increase.”

Id., at 149,257 (citations omitted). Bay has the fundamental responsibility to prove by a preponderance of the evidence that a Government action caused its labor to be less efficient than planned as well as the extent of that impact. *Centex Bateson Construction Company, Inc.*, VABCA Nos. 4613, *et al.*, 99-1 BCA ¶ 20,153; *Dawson*, 93-3 BCA ¶ 26,177; *Triple “A” South*, ASBCA No. 46866, 94-3 BCA ¶ 27,194; *Bechtel National, Inc.*, NASA BCA No. 1186-7, 90-1 BCA ¶ 22,549.

The Appellant wholly failed to present probative evidence of lost productivity. Again, Mr. Kim’s charts and summary conclusions that Bay had lost productivity because work was in some instance done out of sequence and piecemeal in some areas fall far short of the proof we expect for such cases. His attempt at quantification, applying two methods to price Bay’s alleged damages for what he said was Bay’s lost productivity was not compelling for many of the same reasons we articulated in our earlier discussions of his delay and

suspension analysis. Bay's lack of contemporaneous project documentation of the impact of the delays and its failure to proffer credible testimony, impeached the overall reliability of its evidence. While Mr. Kim was very willing to assume Government-caused delay and interference, there was very little evidence in the record to back up his assumptions. He had even less professional experience analyzing lost productivity than he had in delay and suspension analysis.

Given the size and complexity of this project, the number and nature of changes reflected in the SAs were not so momentous as to impact the project in the significant and serious ways that Appellant claims. As we recently stated in *Clark Construction Group, Inc.*, "[t]he after-the-fact, conclusory assessments of the project managers or the opinions of its experts are not sufficient substitutes for [the contractor's] underlying obligation to contemporaneously document the severe adverse impact on labor efficiency it now claims resulted from the changes and RFIs." *Clark Construction Group, Inc.*, VABCA No. 5674, 00-1 BCA ¶ 30,870 at 152,413, citing *Fru-Con Construction Corporation v. United States*, 43 Fed. Cl. 306 (1999), *aff'd* 250 F.3d 762 (Fed. Cir. 2000)(Table); *Centex Bateson*, 99-1 BCA ¶ 20,153; *Triple "A" South*, 94-3 BCA ¶ 27,194. We conclude that Bay's evidence failed to provide proof of change to working conditions or loss or productivity.

To the extent the Appellant or the VA raised other issues or arguments related to these appeals, we have fully reviewed and considered them and found them unpersuasive.

DECISION

For the foregoing reasons, the Appeals of Bay Construction Co., VABCA Nos. 5594, 5625-5626, 5628, and 5831, under Contract No. V662C-1439, are **DENIED.**

DATE: **March 19, 2002**

GUY H. MCMICHAEL III
Administrative Judge
Panel Chairman

We Concur:

PATRICIA J. SHERIDAN
Administrative Judge

RICHARD W. KREMPASKY
Administrative Judge