GOVERNMENT OF THE DISTRICT OF COLUMBIA
CONTRACT APPEALS BOARD

APPEAL OF:

CIVIL CONSTRUCTION, LLC	)	
	)	CAB Nos. D-1294, D-1413, and D-1417
	)	
Under Contract No. POKA-2004-B-0018-JJ	)	

For the Appellant, Civil Construction, LLC: Robert A. Klimek Jr., Esq., Leonard C. Bennett, Esq., Klimek & Casale, P.C.; Christopher M. Kerns, Esq. For the District of Columbia: Brett A. Baer, Esq., Office of the Attorney General.

Opinion by Administrative Judge Monica C. Parchment with Chief Administrative Judge Marc D. Loud, Sr. and Administrative Judge Maxine E. McBean concurring.

OPINION

Filing ID #51146070

These consolidated appeals arise under a contract for the reconstruction of a six block span of paved street-way, on F Street, in the northwest corridor of the District of Columbia. It is undisputed by the parties that, after the initial contract award, the District subsequently modified the terms of this contract to significantly alter the order in which the Appellant was required to perform the sequence of the project's construction activities under the contract's original traffic maintenance plan. However, the parties dispute the resulting delay impact to the project, and associated quantum of damages incurred by the Appellant, arising from this change order. In this regard, the present action initially arises from the Appellant's appeal of the contracting officer's decision to only grant a 90 day time extension and $204,000.00 in additional compensation to the Appellant in connection with the subject change order issued by the District that modified the sequence of the project construction activities. The Appellant also appeals from the deemed denial of its claims seeking unabsorbed overhead incurred under its extended contract performance in connection with this same contract change.

We sustain the appeal, in part, and find the Appellant entitled to a time extension of 166 days arising from the subject District-ordered change, as well as related damages from the District associated with the Appellant's increased labor, equipment, and overhead costs arising from the same change order. The District shall compensate the Appellant for these cost items in accordance with the damage amounts awarded by the Board herein.

FINDINGS OF FACT

1. On March 1, 2005, the District Department of Transportation ("DDOT") entered into Contract No. POKA-2004-B-0018-JJ with Civil Construction, LLC ("Civil" or "Appellant") for the reconstruction of F Street, N.W., between 17th and 23rd streets (the "F Street Project") in the amount of $4,592,285.72. (Appeal File ("AF") Ex. B.2.) Contract performance was to be completed within one year. (*See* Hr'g Tr. 97:3, 324:19, 881:19.)

2. F Street is a two-lane roadway for eastbound only traffic and is bordered by residential, commercial, educational, and governmental buildings. (Stipulated Fact ("SF") 2.) The F Street Project entailed a full reconstruction effort that included upgrading all of the underground utilities, reconstruction of the street curb and lighting, as well as replacing the landscaping and signage. (Hr'g Tr. 881:7.) The reconstruction effort involved replacement of underground utilities—including water lines, storm drains, and electrical duct banks—along the six city blocks on F Street between 17th and 23rd Streets. (Hr'g Tr. 176:7-178:1.) Additionally, the F Street Project involved reconstruction of the sidewalk, gutter, and roadway structures. (*Id.*)

3. Under the Contract's Maintenance of Traffic specifications, contract drawings 56-61, Civil was directed by the contract terms to restrict access to one lane of traffic at a time. (*See* Appellant's Hr'g Ex. 39.) In particular, the Maintenance of Traffic specifications divided the F Street Project into two phases, with construction work to be completed along the south side of F Street in the first phase followed by the north side in the second phase. (*Id.*)

4. Consistent with the Contract's Maintenance of Traffic specifications, Civil's baseline schedule[1] included a plan to complete the project in four phases: (1) complete the underground utility work along the north side of F Street; (2) complete the underground utility work along the south side of F Street; (3) perform street-level maintenance along the south-side lane; and (4) complete street-level maintenance on the north-side lane. (SF 4; Appellant's Expert Report[2] Ex. 2.) Civil planned to perform work along the north side of F Street first, rather than the south side, in order to accommodate the work required in replacing the water lines. (Hr'g Tr. 107:8-110:20, 173:4-174:3.) This change, however, was a small variance to the contract specifications and did not affect the overall cost or completion date of the contract. (Hr'g Tr. 107:21.)

5. The Appellant further divided each phase of the contract into a sequence of smaller jobs; each to be performed by a different utilities or construction crew. (Hr'g Tr. 176:18-179:22.) The Appellant sequenced the F Street Project so that the first crew would begin work on one city block and consecutively move on to the next block, while another crew would follow suit. (Hr'g Tr. 178:16-180:7.) The crew working on the water line would begin work first, followed by the crew working on the storm drains, and then the electrical crew. (Hr'g Tr. 176:18-179:1.) These crews would be followed by crews working on the sidewalk and curb, the crew excavating the roadway, and lastly the crew doing the asphalt work. (Hr'g Tr. 177:15-179:8.)

6. Under the Appellant's baseline schedule, Civil planned to have multiple crews working simultaneously throughout the entire six blocks of the F Street Project, from 23rd Street to 17th Street as each entire side (north and south) of these streets were, respectively, restricted from traffic access. (Hr'g Tr. 86:13-87:4, 180:3-182:21.) This approach was consistent with, and anticipated by, the Maintenance of Traffic specifications.[3] (*See* Appellant's Hr'g Ex. 39.)

[1] Appellant submitted its initial baseline schedule to the District for approval on May 9, 2005. (SF 3.)
[2] Appellant's Expert Report was entered into evidence as Appellant's Hearing Exhibit 41.
[3] This interpretation of the F Street Project specifications was confirmed through the testimony of Civil's employees (Hr'g Tr. 70:12-20, 86:1-87:21, 169:8-171:5); an employee of Fort Myer Construction (which had been a competing bidder for the contract) (Hr'g Tr. 682:3-18); and the Contracting Officer (Hr'g Tr. 881:6-882:19).

7. The District issued a Notice to Proceed on April 25, 2005, authorizing the Appellant to begin work on May 9, 2005, and establishing an original contract completion date of May 8, 2006. (SF 5, 7.)

8. On May 7, 2005, Civil placed 2,172 linear feet of concrete barrier along F Street in anticipation of contract performance. (SF 6; *see also* Hr'g Tr. 185:1-7.)

Change Order

9. Immediately after Civil placed the concrete barrier, the neighboring community began objecting to the anticipated disruption the planned construction would cause. (Hr'g Tr. 89:10-22, 185:12-186:4, 882:9.) The District verbally instructed Civil to remove most of the concrete barrier that it had erected and only perform the contracted work in two-block increments so that more of F Street would be accessible to traffic as the contract work progressed. (Hr'g Tr. 89:18-22, 186:8-14.) Moreover, on May 19, 2005, less than two weeks after Civil began its contract performance, the Contracting Officer ("CO") issued a written letter, pursuant to Article 3 of the Standard Contract Provisions, limiting the phasing of the F Street Project to only permit the construction work to be performed two blocks at a time for the remaining duration of contract performance (hereinafter "Change Order"). (AF Ex. B.3.) In his letter, the CO specifically referenced the Maintenance of Traffic drawings that were incorporated into the contract terms. (*Id.*)

10. By a letter dated May 24, 2005, the Appellant acknowledged receipt of the CO's May 19, 2005, Change Order. (AF Ex. C.5.) In its acknowledgement letter, the Appellant stated that the two-block restriction would materially change the nature of the project and thus drastically increase the duration and associated costs. (*Id.*) Accordingly, the Appellant requested that a formal change order be negotiated to reflect the increased duration and costs arising from this change mandate. (*Id.*)

11. The new two-block construction restriction in the Change Order limited the work space available to the Appellant's various crews, which in turn reduced productivity as crews had to perform smaller tedious tasks continuously throughout the project instead of consecutively progressing Civil's work through the entire length of F Street (17th to 23rd streets) as originally planned. (Hr'g Tr. 110:12-112:19, 270:1-272:2.) Productivity was also reduced as crews were required to start and stop work along the length of the project in two-block increments, which resulted in additional mobilizations and demobilizations by the Appellant beyond what was anticipated by the baseline schedule. (Hr'g Tr. 190:1-191:3.) These added inefficiencies consequently increased the costs associated with performance. (Hr'g Tr. 240:2-20, 268:1-272:19.)

12. The Appellant submitted a "good faith estimate" of the anticipated cost impact of the two-block restriction on July 15, 2005, along with a revised schedule on July 21, 2005. (Appellant's Hr'g Exs. 4, 5.)[4] In this submission, Civil initially estimated that the two-block restriction would extend the original date of contract completion by 18 months, and thus would result in the contract not being completed until December 24, 2007. (Appellant's Hr'g Ex. 4 at

[4] Appellant's Hearing Exhibits 4 and 5 are also included in the record as Appeal File Exhibits C.6-1 and C.7, respectively.

35; Appellant's Hr'g Ex. 5 at 119.) The Appellant reiterated its May 24, 2005, request that a formal change order be negotiated to reflect the impact of the two-block restriction that had been imposed by the District. (Appellant's Hr'g Ex. 4 at 35.)

13. Furthermore, the Appellant estimated that its contract costs would increase by an additional $2,375,275.18 due to extra costs it would incur in connection with the newly-added two-block construction restriction. (Appellant's Hr'g Ex. 4 at 40.) The estimate included anticipated increased costs for labor, equipment, materials, field supervision, safety, additional work, and other associated costs. (Appellant's Hr'g Ex. 4 at 40-58, 71-75.) Additionally, the estimate included additional subcontractor costs, including Civil's electrical subcontractor, Central Armature Works, Inc. ("Central Armature"), and an unidentified asphalt subcontractor. (Appellant's Hr'g Ex. 4 at 59-62, 68.) The Appellant's estimate, however, specifically did not include extended home office costs. (Appellant's Hr'g Ex. 4 at 35.) In support of its estimate, the Appellant also included a detailed breakdown of its costs as originally bid. (Appellant's Hr'g Ex. 4 at 76-114.)

14. By a letter of August 10, 2005, Civil received a letter from a consultant for the District, Terence Wright, informing Civil that its July 21, 2005, schedule had been rejected, in part because the schedule did not reflect the current as-built status of the F Street Project. (AF Ex. C.9.)

15. Subsequently, on August 12, 2005, almost three months after the Change Order was issued, Civil entered into a subcontract with Fort Myer Construction Corporation ("Fort Myer") to perform the required asphalt work on the F Street Project. (Appellant's Hr'g Ex. 31.) The subcontract contained unit prices and a specified quantity for, *inter alia*, base and surface asphalt. (Appellant's Hr'g Ex. 31 at 359.) The unit prices in this subcontract expressly included the cost of any mobilizations that Fort Myer would incur to complete the project. (Appellant's Hr'g Ex. 31 at 357; Hr'g Tr. 683:14-17, 762:5-22.) The subcontract expressly incorporated Civil's prime contract with the District but, inexplicably, did not incorporate the two-block restriction in the Change Order that the District had previously issued on May 19, 2005.[5] (*See* Appellant's Hr'g Ex. 31 at 363-64.) Fort Myer only anticipated that 10 mobilizations/demobilizations would be required to perform the subcontract. (Hr'g Tr. 687:2-690:12, 762:19.)

16. By September 8, 2005, Civil had completed work on the north side of F Street between 23rd Street and 21st Streets. (AF Ex. C.11 at 3.) Civil completed work along the south side of F Street between 23rd Street and 21st Streets on or about December 12, 2005. (*Id.* at 4.)

17. After finishing work between 23rd Street and 21st Street, Civil began work on the north side of F Street between 20th Street and 18th Street. (Hr'g Tr. 103:11-104:20.) Civil was required to temporarily bypass the block between 21st Street and 20th Street due to dormitory

[5] The subcontract specifically included a provision under which the parties were to indicate any modifications made to the prime contract prior to the execution of the subcontract. (Appellant's Hr'g Ex. 31 at 364.) While this provision referenced wage determinations and equal opportunity requirements, it made no mention of the May 19, 2005, Change Order. (*See Id.*)

construction/renovation work being performed by a third party, Donohoe Construction, on behalf of the George Washington University ("GWU").[6] (Hr'g Tr. 105:2-7.)

Rescission of the Change Order

18. While Civil was performing work on the north side of F Street between 20th and 18th Streets, the CO rescinded the May 19, 2005, Change Order, by a letter dated January 19, 2006, largely as the result of its recognition of the resulting performance impact upon Civil's project schedule. (Appellant's Hr'g Ex. 34; Hr'g Tr. 256:16, 890:5-891:7.) This letter expressly rescinded the two-block restriction immediately, although it still required that Civil submit a revised schedule to the District for review and approval prior to starting work on the 1700 block of F Street. (Appellant's Hr'g Ex. 34.)

19. On March 7, 2006, Civil submitted a revised schedule to the District ("Revised Schedule #3"). (Hr'g Tr. 245:5-246:19, Appellant's Hr'g Ex. 11.) The revised schedule included Civil's actual progress through February 22, 2006, and set a new completion date of June 2, 2007, for the project. (Appellant's Hr'g Ex. 11.)

20. The Appellant did not begin work on the 1700 block of F Street immediately after submitting the March 7, 2006 schedule; rather the Appellant interpreted the CO's January 19, 2006, directive as requiring District approval of the revised schedule prior to proceeding with work on that block.[7] (Hr'g Tr. 246:5-247:19.)

21. The District rejected Civil's Revised Schedule #3 on March 15, 2006. (AF Ex. C.17.) The District took issue with four activities that were added to the critical path and the additional duration of five activities, which added up to an additional 112 working days. (*Id.*) The District also claimed that the schedule did not reflect the current status of activities. (*Id.*)

22. The Appellant resubmitted Revised Schedule #3 on March 20, 2006. (Appellant's Hr'g Ex. 17 at 193-204.) In its resubmission, the Appellant included a narrative defending those elements of its schedule that the District previously found problematic and which were the basis for its rejection of Civil's earlier version of the Revised Schedule #3 that had been submitted on March 7, 2006. (Appellant's Hr'g Ex. 17 at 194.)

23. In response to Civil's resubmission of Revised Schedule #3, on April 5, 2006, another consultant for the District, Alpha Corporation, issued a report (the "Alpha Report") analyzing the propriety of Appellant's Revised Schedule #3. (Appellant's Hr'g Ex. 17.) In summary, the Alpha Report identified 14 different aspects of Civil's revised schedule that it deemed either inaccurate, incomplete, and/or requiring further details. (*Id.* at 183-84.) Moreover, the Alpha Report concluded that, as of February 22, 2006, the F Street Project was delayed 90 calendar days as a result of the Change Order which imposed the two-block construction restriction for

[6] Civil first learned of this ongoing work during an October 12, 2005, progress meeting, according to the meeting minutes. (Appellant's Expert Report Ex. 7 at 65.) At a November 30, 2005, progress meeting, Civil was informed that the dormitory construction for GWU would not be complete until about late April or early May 2006. (Appellant's Expert Report Ex. 8 at 169.)

[7] John Constantino, Civil's general superintendent, testified, however, that the Appellant never stopped work on the F Street Project. (Hr'g Tr. 275:15-276:4.)

the performance of the contract.[8] (*Id.* at 182.) The Alpha Report also created a new performance schedule for the contract with a completion date of August 7, 2006. (*Id.* at 223-31.)

24. On or around April 7, 2006, the Appellant was instructed by District representatives to proceed with work on the 1700 block without an approved schedule. (Hr'g Tr. 119:17-120:15, 250:2-9.)

25. On April 10, 2006, the District rejected Civil's Revised Schedule #3. (AF Ex. C.18.) The District provided numerous bases for rejecting this schedule, which appear to be based upon the conclusions in the Alpha Report, and also included a new contract completion date of August 7, 2006, for the project. (*Cf.* AF Ex. C.18, *with* Appellant's Hr'g Ex. 17 at 183-185.)

26. On April 27, 2006, Civil responded to the District's April 10, 2006, letter and disagreed with the 14 areas of concern raised by the District as the basis for its rejection of Civil's Revised Schedule #3. (AF Ex. C.20.) In this regard, the Appellant advised the District that its rejection of the revised schedule was based upon a lack of background information about the project and an attempt to artificially reduce the duration of the project. (*Id.* at 1.) By way of example, Civil disagreed with the District's conclusion that Civil's revised schedule showed no planned work activities between certain periods of time by pointing to specific work activities that were occurring within the timeframes at issue. (*Id.*) In another instance, Civil defended its claimed winter shutdown periods and claimed that certain activities could not be completed during cold weather. (*Id.*)

Civil's Performance after Rescission of the Change Order

27. At no point during Civil's performance of the F Street Project did the District approve Civil's work schedule. (Hr'g Tr. 152:2, 187:7, 933:9-13.) Civil, however, continued to perform on the F Street Project without stopping work. (Hr'g Tr. 275:7-276:4.) Civil completed construction along the north side of F Street on or about July 10, 2006.[9] (*See* Appellant's Expert Report 14; Hr'g Tr. 443:14-445:2 (Feb. 29, 2012).)

28. Civil also worked on two additional F Street projects concurrent with its work for the District. From July 11 through July 17, 2006, Civil worked on excavating a communications duct bank for GWU between 21st and 20th Streets. (Appellant's Hr'g Ex. 24 at 262-66.) The work for GWU was done under a separate contract and had to be performed concurrently with the F Street Project due to the District of Columbia's five-year moratorium on digging along newly constructed roads that would have otherwise precluded GWU from having this work done for a five year period after the contract was completed. (Hr'g Tr. 260:4-262:17, 282:1-14.)

29. Civil also worked on an additional duct bank under contract with the federal General Service Administration ("GSA") between 17th and 18th Streets because GSA also sought to have this work completed before the five year moratorium on newly constructed roads would

[8] The Alpha Report also speculates that some of the delay may have been due to concurrent delay caused by Civil. (Appellant's Hr'g Ex. 17 at 182.) However, the Alpha Report contains no support for that assertion.

[9] The document supporting this date appears to be taken from a District Inspector's daily report that was not included in the record. However, it is consistent with the daily reports that were included in the record. (*See* Appellant's Hr'g Ex. 24 at 260-62.)

temporarily preclude its ability to have this work done at a later time. (Hr'g Tr. 262:1-17.) This construction lasted from August 17, 2006, through September 27, 2006. (*See generally* Appellant's Hr'g Ex. 24; Hr'g Tr. 267:14-297:12.) This work for GSA was extended beyond its original completion date, in part, due to work stoppages at the direction of the Secret Service. (Hr'g Tr. 241:5-244:12.)

30. Civil substantially completed performance on the F Street Project on December 20, 2006—a project duration of 591 days. (SF 15.)

Civil's Claims

31. On April 27, 2006, the Appellant submitted its first claim to the CO requesting a final decision on its July 15, 2005, request for a formal change order. (AF Ex. C.19.)

32. At some point thereafter, the CO scheduled a meeting with the Appellant to discuss its April 27, 2006, claim. (Hr'g Tr. 129:7, 145:3, 930:2.) The CO subsequently halted this meeting based upon his belief that negotiation efforts with the Appellant regarding its claim would be futile. (Hr'g Tr. 129:7-130:15, 931:2-3.)

33. Subsequently, on June 16, 2006, the CO issued a final decision denying the majority of the Appellant's April 27, 2006, claim. (AF Ex. A.1.) The CO's decision, however, granted Civil a 90 day time extension to complete the contract by August 6, 2006. (*Id.*) The CO also awarded Civil an additional $204,000.00 in compensation for its damages and extended jobsite overhead costs arising from the Change Order.[10] (*Id.*) The CO's decision expressly noted that this time extension and additional compensation to the Appellant were granted as damages resulting from the Change Order that altered the original construction work phasing requirements in the Maintenance of Traffic plans incorporated into the contract. (*Id.*)

34. On June 19, 2006, the CO issued a formal change order reflecting his final decision on Appellant's April 27, 2006 claim, which granted some compensation to Civil in connection with the Change Order. (AF Ex. B.4.) This change order expressly included unabsorbed home office costs (including unabsorbed field and home office costs) in the $204,000.00 compensation awarded to Civil. (*Id.*)

35. Civil appealed the CO's June 16, 2006, final decision to this Board on September 6, 2006. (Sept. 6, 2006, Notice of Appeal.) We docketed the appeal as CAB No. D-1294.

36. On August 23, 2007, Fort Myer submitted a request for an equitable adjustment to Civil in the amount of $40,894.26 seeking damages related to additional mobilizations and demobilizations, which it performed which it claims were beyond the scope of the contract. (Appellant's Hr'g Ex. 40.) Specifically, Fort Myer's request for an equitable adjustment included the cost of 13 additional mobilization/demobilization efforts (in addition to the 10 that Fort Myer had originally anticipated) at $1700.00 per mobilization, additional supervisory expenses, inefficiency expenses, and increased labor and material costs, which it claims to have incurred as the result of the District's Change Order. (*Id.*)

[10] Civil has been paid the $204,000.00 awarded in the CO's final decision. (Hr'g Tr. 146:19-147:7)

37. On August 3, 2010, the Appellant submitted a claim to the CO seeking unabsorbed extended home office overhead costs for the 90 day period between May 8, 2006, and August 6, 2006, in the amount of $108,900.00 using the Eichleay formula.[11] (Nov. 8, 2010 Notice of Appeal.)

38. On August 12, 2010, Civil similarly submitted a second claim for unabsorbed overhead using the Eichleay formula for the 122 day period between August 7, 2006, and December 9, 2006, in the amount of $147,620.00. (Nov. 18, 2010 Notice of Appeal.)

39. Civil appealed to this Board from the deemed denials of both of these overhead claims after the CO failed to issue a final decision on these two claims. (Nov. 8, 2010 Notice of Appeal; Nov. 18, 2010 Notice of Appeal.) We docketed the appeals as CAB No. 1413 and CAB No. D-1417, respectively. We consolidated the Appellant's three appeals relating to the F Street project on June 2, 2011.

40. The Appellant filed an amended complaint with regard to the consolidated appeals on February 21, 2012. The Amended Complaint seeks an equitable adjustment in the amount of $1,033,014.61. (Am. Compl. 6.) This amount includes $324,508.26 for its Field Labor Increase; $198,659.28 for its Equipment Increase; $16,849.80 for Additional Scheduling Requirements; $227,503.26 for Extended Field Overhead Increases; $205,523.58 for Extended Home Office Overhead Increases; and also includes a combined amount of $59,970.43 on behalf of its electrical and asphalt subcontractors (Central Armature and Fort Myer, respectively).[12] (Am. Compl. 6-7.)

The Appellant's Calculation of Delay Impacts

41. The Board conducted a four day hearing on the merits in these consolidated cases beginning on February 28, 2012, based primarily upon the Appellant's appeal from the CO's denial of its April 27, 2006, claim.

42. At the hearing, the Appellant employed an expert, Scott A. Galbraith, to provide a report and various schedules, with his corresponding testimony, to substantiate the Appellant's claimed delay impact and damages arising from the District's issuance of the Change Order immediately after it began performance of the contract. Galbraith relied upon several primary resources in making his delay and impact findings, and his damage calculation. In particular, Galbraith reviewed the following materials to corroborate his findings as to the events that occurred during contract performance: 1) project schedules that Civil submitted to the District; 2) daily contract performance reports internally generated by the District; 3) Civil's July 15, 2005, cost estimate

[11] The Eichleay formula was originally set forth by the Armed Services Board of Contract Appeals in *Eichleay Corp.*, ASBCA No. 5183, 60-2 BCA ¶ 2688 (July 29, 1960) to equitably determine the allocation of unabsorbed overhead incurred due to government-caused delay. *Nicon, Inc. v. United States*, 331 F.3d 878, 882 (Fed. Cir. 2003). "The Eichleay formula requires three steps: 1) to find allocable contract overhead, multiply the total overhead cost incurred during the contract period times the ratio of billings from the delayed contract to total billings of the firm during the contract period; 2) to get the daily contract overhead rate, divide allocable contract overhead by days of contract performance; and 3) to get the amount recoverable, multiply the daily contract overhead rate times days of government-caused delay." *Wicham Contracting Co. v. Fischer*, 12 F.3d 1574, 1577 n.3 (Fed. Cir. 1994).

[12] The Amended Complaint also sought $1,000.00 representing the unpaid balance on the contract. (Am. Compl. 6.)

for the project; 4) the CO's final decision; and 5) documents produced by the District during the course of this litigation. (Appellant's Expert Report 3-4; *see also* Hr'g Tr. 396:10-402:1.) Moreover, Galbraith's report compared, *inter alia*, Civil's original base line schedule (a forward-looking schedule) with as-built data as of February 21, 2006, and with Civil's final as-built schedule. (*Id.* at 266.)

43. As part of his analysis, and as discussed further below, Galbraith identified delays to Civil's performance of the contract within four specific periods of performance using a critical path method ("CPM") time impact analysis. (Appellant's Expert Report 12-18; Hr'g Tr. 409:18-410:15.) Because the CO's Final Decision, and the Alpha Report upon which it was based, covered delays incurred through February 21, 2006, Galbraith's CPM analysis was limited to the period from February 22, 2006 until substantial completion of the project.[13] (*See Id.* at 12.)

Impact Period No. 1 (February 22, 2006 through March 7, 2006)

44. The first delay impact period identified by Galbraith covers the period February 22, 2006, through March 7, 2006, when Civil first submitted Revised Schedule #3.[14] (Appellant's Expert Report 12-13; Hr'g Tr. 535:12-536:22.) As an initial matter, Galbraith determined that, as of February 22, 2006, the F Street Project was already delayed by 140 calendar days.[15] (*Id.* at 11; Hr'g Tr. 408:7-412:15.) This 140 day delay period, as determined by Galbraith, is the numerical difference between when the project was originally scheduled to be completed on May 8, 2006, and the date which Galbraith subsequently projected the contract to be completed on September 25, 2006, as discussed below. (Appellant's Expert Report 11; Hr'g Tr. 412:2-7.) Galbraith attributed the entire 140 day delay as due to the Change Order's two-block restriction. (*Id.* at 19; *see also* Hr'g Tr. 403:11.)

45. In arriving at the determination that there was a 140 day delay, Galbraith began by reviewing Civil's Revised Schedule #3, which contained the as built data through February 21, 2006. (Appellant's Expert Report 7-8; *see also* Hr'g Tr. 413:16-414:5.) For purposes of comparison, Galbraith then recreated the schedule generated by the Alpha Report using the report's seven recommendations, which led the District to determine that the contract's new completion date was August 7, 2006. (*Id.* at 9.) Galbraith, however, found that Alpha's schedule was flawed because it did not restore Civil's original sequencing of performing utility work activities before street level work activities within a given block and on a given side of F Street. (*Id.* at 9-10; *see also* Hr'g Tr. 568:5-570:19.) In particular, the schedule contained in the Alpha Report shows utility work and street-level work being performed at the same time. (Appellant's Hr'g Ex. 17 at 223-24, 229-30.) However, in order to create a schedule consistent with the intent of Civil's original work sequence plan, Galbraith added relationships and predecessors to certain activities in the Alpha schedule to restore Civil's planned sequencing to

[13] At the time of the District's rescission of the two-block work area restriction in January 2006, Civil's work zone was established along the north side of F Street between 20th and 18th Streets. *See supra* finding 18.

[14] The expert noted that by the end of 2005 Civil had completed utilities and street work through base paving activities from 23rd Street to 21st Street on both the north and south sides of F Street. (Appellant's Expert Report 6; *see also* Hr'g Tr. 254:7 (John M. Constantino testifying that this was the first section worked).)

[15] The February 22, 2006, date indicates that the data leading up to this date is based on Civil's as-built schedule, and is the same February 22, 2006 "data date" used in Civil's March 7, 2006, Revised Schedule #3. (Hr'g Tr. 411:9; Appellant's Hr'g Ex. 11.)

complete the contract. (Appellant's Expert Report 10-11; Hr'g Tr. 569:10-570:19.) With these changes, Galbraith established a new schedule showing all work completed on September 25, 2006, 140 days after the original May 8, 2006, completion date. (*Id.* at 11, 255-61; Hr'g Tr. 536:2-536:8.)

46. Galbraith also determined that Civil was delayed an additional 14 days between February 22, 2006, and March 7, 2006, when it was precluded from working between 17th and 18th streets because it was preparing a revised contract performance schedule for approval by the District before it fully mobilized onto the project again, as required by the CO's January 19, 2006, letter. (Appellant's Expert Report 12-13; Hr'g Tr. 416:11-420:20.)

Impact Period No. 2 (March 8, 2006 through July 17, 2006)

47. Galbraith identified a second impact period between March 8, 2006, and July 17, 2006, which covers the period between Civil's submission of its revised schedule and when Civil actually started performing the Phase 2 utility activities on the south side of F Street between 21st Street and 17th Street. (Appellant's Expert Report 13; Hr'g Tr. 430:7-430:10.) In other words, Galbraith defined this impact period to include the completion of the north side of F Street (through base paving) from 21st Street to 17th Street. Galbraith determined that during this time period, Civil had incurred an additional 33 calendar days of delay. (*Id.* at 13-15; *see also* Hr'g Tr. 430:7-430:16.) Galbraith assigned 32 calendar days of delay during this period to Civil for failing to mobilize on the 1700 block of F Street until April 8, 2006, without a District-approved schedule despite having submitted a revised schedule to the District for approval after the Change Order was rescinded. (*Id.* at 15; *see also* Hr'g Tr. 430:20-431:1.)

48. Further, Galbraith determined that during this same time period Civil's progress on the contract was also impacted by many other critical delays, totaling 22 calendar days of delay, for which Civil was *not* responsible including: 1) delay attributable to Secret Service stop work orders (1 calendar day); 2) weather impacts after original contract completion date (13 calendar days);[16] 3) traffic switch from north to south side of F Street (1 calendar day); and 4) additional duct bank work required for GWU (7 calendar days).[17] (Appellant's Expert Report 15; *see also* Hr'g Tr. 435:2-450:13.) Galbraith, however, determined that Civil was able to overcome 21 of these overall 54 calendar days of delay during this period and, therefore, that Civil was only responsible for 11 of the total 33 total critical delay days during this timeframe.[18] (*Id.*) At the hearing on the merits in this matter, this expert testified extensively about his basis for these finding of delays in delay impact period No. 2 that were attributable to Civil and others. (*See generally* Hr'g Tr. 429:17-450:13.)

[16] The 13 days of weather impact include 11 days of adverse weather and 2 days as a conversion from work days to calendar days. (Appellant's Expert Report 14; *see also* Hr'g Tr. 436:12-437:11.)

[17] While Galbraith found that Donohoe Construction's work for GWU delayed Civil's work for 79 days during this period, he determined that this delay was not along the critical path of the project. (Appellant's Expert Report 14; *see also* Hr'g Tr. 431:12.)

[18] Galbraith determined the ultimate 33 delays of delay based upon subtracting Civil 21 day "credit" for overcoming delays during this time period from the original 54 days of delay which Galbraith found to have occurred during this time period. (Appellant's Expert Report 14-15; Hr'g Tr. 448:4-449:7.)

Impact Period No. 3 (July 18, 2006 through September 27, 2006)

49. The third delay impact period identified by Galbraith ranged from the period of July 18, 2006, through September 27, 2006, beginning after Civil completed its prior duct bank work for GWU on the south side of the 2000 block of F Street. (Appellant's Expert Report 15; *see also* Hr'g Tr. 447:19-449:7.) This third period in Galbraith's analysis encompassed Civil's start of Phase 2 utilities activities along the south side of F Street between 21st Street and 17th Street to the start of Phase 3 street-level work along the south side of F Street between 18th and 17th Streets. (*Id.*) During this period, Galbraith attributed 40 days of delay to others because of the additional duct bank installation work that Civil was required to do under a separate contract with the GSA, which was a critical impact to the project schedule.[19] (*Id.* at 16; *see also* Hr'g Tr. 447:19-449:7.) In culmination, as of September 28, 2006, the project was 87 calendar days behind its forecasted critical path, of which 14 calendar days were accounted for in the first impact period, 33 calendar days were accounted for in the second delay impact period, and 40 days of delay were included from delay impact period No. 3. (Appellant's Expert Report 16; *see also* Hr'g Tr. 447:19-449:7.)

Impact Period No. 4 (September 28, 2006 through Substantial Completion)

50. The final period identified by Galbraith, from September 28, 2006, through December 20, 2006, covers Civil's start of Phase 3 street-level activities and concludes with the placement of surface asphalt paving and striping activities for the entire length of the project (i.e., substantial completion of the contract). (Appellant's Expert Report 17-18; *see also* Hr'g Tr. 409:1-409:18.) Galbraith attributed five delay days in this period to the District consisting of a November 8, 2006, weather delay and four days of delay due to the Thanksgiving holiday.[20] (*Id.* at 18; *see also* Hr'g Tr. 539:19-540:19.) However, Galbraith credited Civil with overcoming 6 days of delay, resulting in a net gain of 1 day during this period. (*Id.*)

Total Impact

51. Between the four identifiable delay impact periods on the project noted above, Civil's expert, in referencing findings in his expert report, testified that the project was delayed for a total of 226 days. (Hr'g Tr. 408:7-22, 455:9; *see also* Appellant's Expert Report 19.) Of this total of 226 delay days, Galbraith concluded that 169 of these delay days were attributable to the District as the result of its issuance of the Change Order which changed the original construction traffic sequencing requirements in the contract. (Hr'g Tr. 540:12-541:17.) These 169 days of delay include 140 days of delay which Galbraith determined had been caused by the District after it issued the Change Order on May 19, 2005, through February 21, 2006. (Hr'g Tr. 538:4-541:17.) It also includes the 14 days of delay which Galbraith attributed to the District for requiring that Civil prepare and submit Revised Schedule #3 after the two-block restriction was rescinded before it could resume work on the project, and also another 1 day delay arising from the requirement that Civil switch the traffic barrier for the work zone from the north side to the

[19] Although Galbraith determined that issues with Pepco and Washington Gas delayed Civil by 12 days and 11 days, respectively, he concluded that neither of these delays were on the critical path. (Appellant's Expert Report 16-17.)
[20] On cross examination, Galbraith testified that the Thanksgiving holiday delay should be attributed to the additional duct bank work under Civil's contract with the General Services Administration. (Hr'g Tr. 539:19-540:11.)

south side of F Street on July 10, 2006.[21] (*Id.*; *see also* Appellant's Expert Report Ex. 19 at 266.) Also, Galbraith included in the total 169 delay days attributed to the District another 14 days of delay because of adverse weather conditions which Civil encountered, which stopped work for 14 days, during the extended contract performance period.[22] (Hr'g Tr. 540:1-541:4.)

The Appellant's Damages Calculation

52. Galbraith, in his expert report, ultimately determined that, based upon the delay days attributable to the District, that Civil is entitled to $1,060,273.45[23] in additional compensation resulting from the two-block restriction mandated by the May 19, 2005, Change Order. (Appellant's Expert Report 25; Hr'g Tr. 479:5.) Galbraith arrived at this figure by computing several different areas of costs. (*Id.* at 19-25; *see also* Hr'g Tr. 479:2-480:18.)

53. In calculating increased labor and equipment costs, Galbraith created an estimate based on a daily rate using Civil's as-bid labor costs as submitted in support of its July 15, 2005, good faith estimate. (Appellant's Expert Report 20-22; *see also* Hr'g Tr. 468:9-469:20.) According to Galbraith, the actual costs could not be determined because no portion of the F Street Project was unimpacted by the two-block restriction, which precluded him from alternatively performing a calculation of extended labor damages based upon actual labor costs. (*Id.* at 20.)

Labor Costs

54. With regard to labor costs, Galbraith determined that Civil was entitled to an additional $351,766.83. (Appellant's Expert Report 21; *see also* Hr'g Tr. 465:18-468:2.) Using Civil's as-bid labor and burdened labor costs, Galbraith established a daily labor rate of $2,021.65.[24] (*Id.*) Galbraith multiplied this by the 174[25] delay days he had attributed to the District, resulting in his $351,766.83 estimate in Appellant's alleged increased field labor costs.[26] (*Id.*)

55. On cross examination, the District questioned Galbraith as to why he used 350 days rather than 365 in deriving the daily rate. (Hr'g Tr. 542:10-544:18.) Galbraith testified that he

[21] Galbraith, nonetheless, found that the delays which occurred as the result of Civil performing duct bank work for GWU (7 calendar delay days) and the Secret Service (40 calendar delay days) under separate contracts were non-compensable. (Hr'g Tr. 532:9.)

[22] Galbraith, however, admitted during the hearing that his expert report contained a typographical error in that, in several instances there were narratives stating that the District was responsible for 174 delay days instead of 169 delay days identified in other sections of the expert report. (Hr'g Tr. 541:9-542:9.)

[23] At trial, Galbraith submitted a revised expert report in which he determined that the Appellant was owed $1,060,273.45, an increase from the $1,033,014.61 claimed in his initial expert report. (Appellant's Expert Report 25.) This revision stems from a correction made to his labor cost calculation discussed below. (*See* Hr'g Tr. 394:1-395:1.)

[24] Civil's as-bid labor and burdened labor costs totaled $909,528.86. (Appellant's Hr'g Ex. 4 at 76.) Galbraith subtracted from this amount $201,952, which represents Civil's foreman costs, giving an adjusted as-bid labor costs of $707,576.86. (Appellant's Expert Report 21; *see also* Hr'g Tr. 395:20-396:1.) Galbraith then divided by 350 days for "planned on-site duration" to establish a daily labor rate of $2,021.65. (*Id.*)

[25] See *supra* note 22.

[26] Originally, Galbraith subtracted $256,784.00 as representing foremen labor costs. (Appellant's Expert Report 21; *see also* Hr'g Tr. 465:18-468:2.) This number represents the actual foremen labor costs incurred. (Hr'g Tr. 393:15-394:21.) Upon discovering the error, Galbraith went through Civil's as-bid cost report and totaled the various foremen labor items, which totaled $201,952. (Hr'g Tr. 465:2-466:8.) Using the original figure, Galbraith had calculated a daily labor rate of $1,864.99 and a total amount owed of $324,508.26. (Appellant's Expert Report 21.)

used 350 days because under Civil's original baseline schedule 350 days was the original duration that Civil planned to be on the project until it was completed. (Hr'g Tr. 466:16, 543:5-544:18.)

Equipment Costs

56. Galbraith also determined that Civil was due an additional $198,659.28 in equipment costs. (Appellant's Expert Report 22; *see also* Hr'g Tr. 469:3-470:3.) Using a similar methodology, Galbraith established a daily equipment rate of $1,141.72, utilizing Civil's as-bid equipment costs as a baseline.[27] (*Id.*) Galbraith multiplied the adjusted daily rate by 174[28] calendar delay days, resulting in $198,659.28 for the Appellant's estimated compensable equipment overrun. (*Id.*)

57. The actual cost data, however, which the Appellant introduced at the hearing, set forth that Civil's actual incurred equipment costs for the project were $563,372.88 for owned equipment and $28,126.12 for rented equipment. (Appellant's Hr'g Ex. 25 at 304-05.) Using this actual cost data, the Board calculates that Civil incurred $591,499.00 in equipment costs.

Scheduling Costs

58. Upon Galbraith's request, Daniel Mullally, Civil's Chief Financial Officer, generated its accounts payable report for CPM scheduling. (Hr'g Tr. 306:16; Appellant's Hr'g Ex. 36.) The report showed invoices for CPM scheduling from two subcontractors, Contractors Engineering Services and McDonough Bolyard Peck, Galbraith's employer. (Appellant's Hr'g Ex. 36.) Contractors Engineering Services submitted 12 invoices, approximately 1 per month, beginning April 2005, through September 2006, for a total of $6,790.00. (*Id.*) McDonough, submitted 5 invoices from August 2006 through August 2007, with the first invoice for $10,000.00 and all 5 totaling $18,466.20. (*Id.*)

59. According to Galbraith, Civil anticipated providing the District with 12 schedules throughout the performance period. (Hr'g Tr. 473:11.) Civil estimated the cost of each schedule to be $450.00. (Appellant's Hr'g Ex. 4 at 69.)

60. Galbraith determined that Civil incurred an additional $15,318.00 in scheduling costs. (Appellant's Expert Report 23; *see also* Hr'g Tr. 473:12-473:15.) Galbraith arrived at this amount by adding the Civil Engineering Services invoices and the three 2006 McDonough invoices and subtracting $5,400.00 representing the cost of the 12 schedules planned under the original contract. (Hr'g Tr. 472:12-473:15.)

[27] Civil's original bid included $449,850.60 in equipment costs. (Appellant's Hr'g Ex. 4 at 76.) Again using 350 days, Galbraith determined a daily rate of $1,285.29. (Appellant's Expert Report 22; *see also* Hr'g Tr. 469:3-470:3.) Galbraith then divided the 350 planned days by the 591 day total duration of the project to arrive at an estimated 59.22% in use rate. (*Id.*; *see also* Hr'g Tr. 469:3-20.) Galbraith multiplied the daily rate by the in use percentage to arrive at a $761.15 in use daily rate. (*Id.*) Galbraith determined an idle rate of half the in use rate, or $380.57. (*Id.*) Galbraith then added the two for an adjusted daily equipment rate of $1,141.72. (*Id.*)

[28] *See supra* note 22.

Field Overhead

61. Galbraith, using a daily rate of $1,307.49,[29] determined that Civil was entitled to an additional $227,503.26 for field overhead by multiplying the daily rate by the 174[30] days of delay he attributed to the District. (Appellant's Expert Report 24; *see also* Hr'g Tr. 467:8.) This calculation was largely based upon internal corporate data that was provided to Galbraith by Civil's Financial Officer, Daniel Mullally.

62. Mullally testified as to various documents he prepared in support of the Appellant's request for field overhead costs. Mullally's testimony described Civil's payroll documents which showed it incurred $580,457.60 for its foremen and project managers.[31] (Hr'g Tr. 302:8-306:19.) Mullally further testified as to the accuracy and completeness of the internal cost data supporting its field office and safety officer costs. (Hr'g Tr. 333:17-336:11.) This cost data established that during the contract period, Civil paid $136,690.56 in salary and benefits for a safety officer. (Appellant's Hr'g Ex. 38 at 1.) Civil, however, only allocated 20 percent of the safety officer's salary, $27,338.11, to the F Street Project. (*Id.*) Civil's cost data further showed that during the contract period Civil incurred $44,165.00 in rent for its field office and other general conditions costs. (*Id.* at 4.)

Extended Home Office Overhead

63. Mullally testified at length as to his calculations concerning Civil's incurred extended home office overhead costs under the Eichleay formula and the data supporting his calculations because the Appellant also seeks to recover these costs. (Hr'g Tr. 323:7-333:2; *see also* Appellant's Hr'g Ex. 37.) Galbraith independently reviewed the same actual billings and overhead cost information provided by Mullally and concluded that extended overhead costs were due to Civil based upon a daily rate of $1,187.17, for a total of $205,523.58. (Appellant's Expert Report 25; *see also* Hr'g Tr. 478:18-479:1.)

Subcontractor Claims

Central Armature Works

64. Central Armature was an electrical subcontractor for Civil in support of the F Street project and is also seeking delay damages in this action through its prime contractor, Civil. Civil's original request to the District for the issuance of a formal Change Order on July 15, 2005, to cover its increased performance costs associated with the two-block construction restriction include estimated increased costs for its electrical subcontractor for the project, Central Armature, in the amount of $101,582.00. (Appellant's Hr'g Ex. 4 at 59-62.) However,

[29] In deriving this figure, Galbraith added 20 percent of the safety officer's salary and benefits, $27,338.11, with the payroll costs of Civil's foremen, superintendents and other supervisors, $580,457.60, for a total of $607,795.71. (Appellant's Expert Report 24; *see also* Hr'g Tr. 476:13-477:7.) Galbraith then applied a 20 percent markup for overhead and profit for a total of $729,354.85. (*Id.*) Galbraith then added $31,959 in rent and $11,412.41 in other field office costs for a total of $772,726.26. (*Id.*) Lastly, Galbraith divided the $772,726.26 figure by 591 days to derive the $1307.49 daily rate.

[30] *See supra* note 22.

[31] The Board received extensive testimony from the witness verifying this cost data, introduced as Appellant's Hearing Exhibit 35, however, this document was not formally moved into evidence by the Appellant.

this original amount being claimed by Central Armature was later significantly reduced to $19,215.11, and then to $15,696.85, as set forth in the expert report. (Appellant's Expert Report 23; *see also* Hr'g Tr. 809:20-810:16.)

65. In outlining Central Armature's claimed damages in his expert report, Galbraith did not perform a detailed analysis of Central Armature's claimed costs, but, instead, seemingly just accepted these claimed costs from Central Armature in the amount of $19,215.11, and only made minor adjustments consistent with Civil's compensable days of delay to arrive at the $15,696.85 figure. (Appellant's Expert Report 23; Hr'g Tr. 471:1-22.)

66. At the hearing in this matter, Charles Redding, an electrical superintendent for Central Armature, provided testimony regarding the basis of this subcontractor claim. Redding, however, could offer no testimony regarding the basis for the downward adjustment in Central Armature's original claim from $101,582.00 to $19,215.11, nor could he identify any contract related documents or other information that could provide the cost details underlying the damages claimed by Central Armature related to the F Street project. (*See generally* Hr'g Tr. 803:2-813:13, 819:1-820:20.)

Fort Myer Construction

67. Fort Myer was another subcontractor that supported the F Street Project by providing asphalt related services. Fort Myer is seeking additional compensation under its subcontract with the Appellant for 13 additional mobilizations, which it alleges that it was required to perform as a result of the Change Order requirements. In determining the amount owed to Fort Myer, Galbraith adjusted the labor and material escalation figures contained in Fort Myer's August 23, 2007, Request for Equitable Adjustment to reflect his finding of 174[32] delay days that were compensable to Civil. (Appellant's Expert Report 23, Hr'g Tr. 471:3-14.) Performing this calculation, Galbraith downwardly adjusted Fort Myer's $40,498.26 claimed amount to $38,821.72. (Appellant's Expert Report 23; *see also* Hr'g Tr. 740:1-16.)

68. Fort Myer's underlying August 23, 2007, Request for an Equitable Adjustment identified 23 days on which it mobilized to perform work on the F Street Project. (Appellant's Hr'g Ex. 40.) Fort Myer requested $1700.00 for each mobilization and corresponding demobilization for 13 of the 23 days, for a total of $22,100.00. (*Id.*) Fort Myer further requested $1,430.00 in additional supervisory costs for the 13 additional days. (*Id.*) Fort Myer also sought $6,045.00 in inefficiency costs. (*Id.*) Fort Myer stated that it incurred a 4% escalation in labor costs, at $3,824.47. (*Id.*) Lastly, Fort Myer sought $7,494.79 as a 3% escalation in material costs. (*Id.*)

69. At the hearing, Ralph Kew, a vice president of Fort Myer, stated that Fort Myer needed to increase its claimed amount from $38,821.72 to $106,217.26. (Hr'g Tr. 740:1-6.) First, Kew testified that Fort Myer had discovered an additional 3 daily reports that showed that Fort Myer mobilized for work on 26 days for the F Street Project, instead of the 23 days used in its August 23, 2007, Request for an Equitable Adjustment. (Hr'g Tr. 695:2-19.) Kew then testified that Fort Myer had audited its finances and determined that the cost of each mobilization was $3,926.76.[33]

[32] *See supra* note 22.

[33] Appellant's Hearing Exhibit 26, however, indicates a mobilization cost of either $3,926.76 or $4,749, depending on the work performed.

(Hr'g Tr. 698:1-703:22; *see also* Appellant's Hr'g Ex. 26.) Kew further stated that Fort Myer was seeking costs for 42 mobilizations, treating mobilizations and demobilizations separately and subtracting the 10 anticipated mobilization/demobilizations. (Hr'g Tr. 707:14-708:8.)

70. Kew further testified that based on audited costs, Fort Myer's additional supervisory costs for the F Street Project were $3,802.56. (Hr'g Tr. 713:13-720:19.) Kew also testified as to a document allegedly supporting labor escalation costs of $3,824.47.[34] (Hr'g Tr. 723:2-727:17.) Lastly, Kew testified, using randomly chosen dates from an asphalt index, that a 3 percent materials cost increase of $7,494.79 was reasonable, which he applied to the amounts being claimed by Fort Myer. (Hr'g Tr. 730:1-738:7; *see also* Appellant's Hr'g Ex. 28.) Based upon these factors, Kew testified that Fort Myer's total mobilization costs should be $91,095.48. (Hr'g Tr. 710:22.)

The District's Contentions

71. The District only offered one witness at the hearing, Contracting Officer Jerry Carter, to discuss the impact to the Appellant in connection with the District's Article 3 Change Order. The CO testified that the Article 3 change to the maintenance of traffic impacted Civil's schedule. (Hr'g Tr. 887:2-8.) The CO, however, testified that the two-block restriction only delayed the project by 90 days. (Hr'g Tr. 887:16-20.) CO Carter also testified that he believed that upon lifting the two-block restriction in his January 19, 2006 letter, Civil was immediately free to begin work on the 1700 block of F Street. (Hr'g Tr. 897:13-898:17, 919:7-920:21.)

72. CO Carter testified that he did not know the basis for computing the $204,000.00 amount that he awarded to the Appellant in his final decision, which assessed the overall delay impact to contract performance caused by the Change Order. (Hr'g Tr. 940:2-20.) The CO, however, did testify that this amount included extended overhead costs. (Hr'g Tr. 908:12.) Moreover, the District offered no additional witnesses at the hearing to validate the basis for its contention that the Appellant was entitled to only $204,000.00 for the Change Order, nor did the District produce any witnesses to present oral or written testimony to refute the expert findings made by Galbraith regarding the cause of critical project delays.

JURISDICTION

The Board has jurisdiction to hear any "appeal by the contractor from a final decision by the contracting officer on a claim by the contractor, when such claim arises under or relates to a contract." D.C. CODE § 2-309.03(a)(2) (repealed 2011).[35] The District argues, however, that the Board lacks jurisdiction because a proper claim was not submitted to the CO. (Dist.'s Post Hr'g Br. 12-15; *see generally* Dist. Trial Mem.) The District's argument rests on the Appellant's failure to certify the claim underlying CAB No. D-1294; the District argues that such failure

[34] However, this document was not introduced into evidence.

[35] The Procurement Practices Reform Act of 2010 ("PPRA") repealed the District of Columbia Procurement Practices Act of 1985 ("PPA"), as amended by the Procurement Reform Amendment Act of 1996 and codified at D.C. CODE § 301.01 *et seq.*, and amended and recodified the District's procurement statutes at D.C. CODE § 2-351.01 *et seq.* effective Apr. 8, 2011. Procurement Practices Reform Act of 2010, D.C. Law. No. 18-371, 58 D.C. Reg. 1185 (Feb. 11, 2011). However, as all the appeals at issue were filed prior to the enactment of the PPRA, the PPA, as amended, applies to all issues in these consolidated appeals, including our jurisdiction.

renders the Appellant's claim defective.[36] (Dist.'s Post Hr'g Br. 12-15; *see generally* Dist. Trial Mem.) According to the District, such certification was required by D.C. CODE § 2-303.08 and by the terms of the contract. (Dist. Trial Mem. 2-4.)

Under federal procurement law, the Contract Disputes Act ("CDA") requires contractors to certify claims over $100,000.00. 41 U.S.C. § 7103(b) (2011 Supp.) (formerly 41 U.S.C. § 605(c)). In interpreting this certification requirement, federal courts and boards have held that lack of a CDA certification deprives the contracting officer and boards of contract appeals of jurisdiction over a claim. *Tecom v. United States*, 732 F.2d 935, 937 (Fed. Cir. 1984); *Red Gold, Inc. v. Dep't of Agric.*, CBCA No. 2259, 12-1 BCA ¶ 34,921 (July 6, 2011); *Tefirom Insaat Enerji Sanayi ve Ticaret A.S.*, ASBCA No. 56,667, 11-1 BCA ¶ 34,628 (Nov. 29, 2010). We have noted, however, that the District's procurement statutes do not include language comparable to the CDA "mandating that contract dispute claims be certified to the CO in the same manner." *Flippo Constr. Co.*, CAB No. D-1422, Order on Mot. to Dismiss 2 (Mar. 29, 2012) (unpublished); *see also* D.C. CODE § 2-308.05 (prescribing the procedure for submission of claims by a contractor against the District).

The District's reliance on D.C. CODE § 2-303.08 is misplaced.[37] D.C. CODE § 2-303.08(a) requires a contractor to submit cost or pricing data for contract awards and modifications over $100,000.00 and to certify that such cost or pricing data is "accurate, complete, and current as of a mutually determined specified date."[38] On its face, the foregoing legal provision explicitly requires a contractor to submit certified cost or pricing data to directly support a contract, a change order, or a contract modification. This provision does not, on the other hand, expressly include, or even address, dispute "claims" within the categories of contract related submissions requiring a supporting cost or pricing certification. *Cf.* D.C. MUN. REGS. tit. 27, § 3899.1 (2004) (defining a claim as a written demand "seeking, as a matter of right, the payment of money in a sum certain the adjustment or interpretation of contract terms, or other relief arising under or relating to the contract."). Consequently, the requirement for certified cost or pricing data in D.C. CODE § 2-303.08 is inapplicable to contractor claims.

For the foregoing reasons, the Board finds that a lack of claim certification does not deprive the Board jurisdiction over the present appeals and the motion to dismiss is denied. Thus, the Board has jurisdiction over the present appeals pursuant to D.C. CODE § 2-309.03(a)(2).

DISCUSSION

The Appellant seeks an equitable adjustment to cover the increased costs that resulted from the District's imposition of the two-block restriction to the F Street Project in the CO's May 19, 2005, Change Order. (Appellant's Post Hr'g Br. 3.) To receive an equitable adjustment, a contractor must show three elements—liability, causation, and resultant injury. *Wilner v. United*

[36] The Board notes that the contested certification appears in the Appellant's claims underlying CAB Nos. D-1413 and D-1417.
[37] The District also relies on Article 7(A)(a)(5) of the Standard Contract provisions; however, the District notes that this provision is derived from the certification requirement in D.C. CODE § 2-303.08(a). (Dist. Trial Mem. 2.)
[38] We have recognized that this requirement is derived from the federal Truth in Negotiations Act, 10 U.S.C. § 2306a. *See Careers & Co.*, CAB No. P-0525, 45 D.C. Reg. 8734, 8737-38 (Feb. 13, 1998).

States, 24 F.3d 1397, 1401 (Fed. Cir. 1994); *Servidone Constr. Corp. v. United States*, 931 F.2d 860, 861 (Fed. Cir. 1991). The Appellant has the burden of proving its entitlement to an equitable adjustment by a preponderance of the evidence. *A.S. McGaughan Co.*, CAB No. D-884, 41 D.C. Reg. 4130, 4135 (Mar. 16, 1994). The Board considers the contracting officer's final decision in reviewing a contractor's claim, but the Board's review is de novo and the factual findings of the contracting officer are not attributed any presumed validity. *See Ebone, Inc.*, CAB Nos. D-971, D-972, 45 D.C. Reg. 8753, 8773 (May 20, 1998).

Entitlement

Under the original Maintenance of Traffic Specifications in the contract, Civil was permitted to work on all six blocks of the F Street Project concurrently. (Findings of Fact ("FF") 3, 6.) In accordance with these specifications, Civil planned to utilize multiple crews simultaneously progressing through all six blocks of F Street, largely one side of the street at a time. (FF 5-6.) By restricting the Appellant to a construction sequence of activities of two blocks at a time, the District substantially disrupted the Appellant's originally planned sequence of work, which led to performance inefficiencies and delays. (FF 11.) Indeed, the CO admitted that this change in the maintenance of traffic specifications in the contract impacted the Appellant's schedule, which ultimately led the District to issue a formal change order granting some relief to the Appellant. (FF 71.) Thus, these basic facts alone are sufficient for the Appellant to be entitled to an equitable adjustment under the Changes Clause. *See H.E. Johnson Co.*, ASBCA No. 48248, 97-1 BCA ¶ 28,921 (Oct. 9, 1996) (disruption to contractor's sequence of work sufficient for entitlement to an equitable adjustment.)

Nonetheless, while the District concurs that there was an impact to Civil resulting from the Article 3 Change Order, to recover delay damages, Civil must demonstrate the extent of the delay and the causal link between the District's actions and the extended delay period claimed by the contractor. *Essex Electro Eng'rs, Inc. v. Danzig*, 224 F.3d 1283, 1295 (Fed. Cir. 2000). In determining the length of the delay resulting from the two-block restriction, we are cognizant of the fact that the Appellant performed the entirety of the contract without an approved schedule. (FF 27.) The District argues that the absence of an approved schedule precludes the Appellant from recovery.[39] (Dist. Post Hr'g Br. 17-18.)

Typically, to properly demonstrate delay on a project, a CPM schedule must be kept current and reflect delays as they occur. *Preston-Bradley Co.*, VABAC Nos. 1892 et al., 87-1 BCA 19,649 (Mar. 3, 1987). The critical path method is an efficient means of organizing and scheduling a complex project consisting of numerous but interrelated smaller projects. *Haney v. United States*, 676 F.2d 584, 595 (Ct. Cl. 1982). The subprojects are classified as to duration and order of precedence. *Id.* Items determined to be on the critical path are those that if not performed on schedule will delay the entire project. *Id.* Accordingly, determining the critical path is crucial because only work along the critical path has an impact on project completion. *Fortec Constructors v. United States*, 8 Cl. Ct. 490, 505 (1985) (quoting *G.M. Shupe, Inc.*, 5 Cl. Ct. 662, 728 (1984)).

[39] In support of its argument, the District cites a clause in the contract requiring Civil to submit and regularly update a CPM schedule. (Dist. Post Hr'g Br. 18.)

While the Board recognizes that Civil did not maintain an up to date CPM schedule at any point during contract performance, this failure largely stemmed from the disagreement between the parties as to the impact of the two-block restriction. (*See* FF 19-26.) Without an approved baseline schedule reflecting the two-block restriction's impact on the phasing for the project, we fail to see how Civil could have provided the updates that the District argues were necessary for Civil to support its claim. Accordingly, Civil's inability to get an approved schedule does not automatically preclude its entitlement to compensatory delay damages, particularly where Civil's expert presented the Board with a detailed CPM analysis through an expert report. *See Fortec Constructors*, 8 Cl. Ct. at 506.

In preparing this CPM analysis, the Appellant's expert reviewed Civil's original baseline schedule as well as as-built data. (FF 42.) His analysis took into account numerous categories of contemporaneous contract and performance documents to corroborate his findings. (FF 42.) Further, the expert's analysis accounted for all delays to the project (critical and non-critical), not simply those caused by the District. (FF 44-51.) Accordingly, the Board finds that the Appellant's expert presented credible evidence and testimony, as part of his CPM analysis, to explain many of the events that occurred during the performance of the contract that resulted in delays after the issuance of the May 19, 2005, Change Order. *See SAE/Americon-Mid Atlantic, Inc. v. Gen. Servs. Admin.*, GSBCA Nos. 12,294 et al., 98-2 BCA ¶ 30,084 (Oct. 23, 1998) ("the device of comparing the as-built progress with the original planning is a worthy and time-honored method of identifying critical delays"); *see also States Roofing Corp.*, ASBCA No. 54,860, 10-1 BCA ¶ 34,356 (Jan. 12, 2010) ("A credible CPM time impact analysis should take into account all of the impacts to the project.").

More strikingly, the District elicited no testimony from this expert on cross examination, or testimony from the District's single witness, that contradicted or refuted any of the expert's findings regarding the delay period that occurred, and the party that was responsible for the delay. The District's sole witness, Contracting Officer Jerry Carter, was even unable to testify as to the basis for his conclusion that the Appellant should only be given a 90 day extension in connection with the performance impact arising from the Change Order. Consequently, based upon the Board's review of the expert findings, as corroborated by the record in this case, we also find that Appellant is entitled to compensable delay damages beyond the 90 days granted by the District in the June 16, 2006, Contracting Officer's Final Decision, as discussed further below.

Actual Delay Days[40]

Both the Appellant's Expert Report and the Alpha Report (prepared on behalf of the District prior to this litigation) treat the overall delay to the Appellant's performance of the contract up until February 22, 2006, as resulting from the two-block restriction imposed by the Change Order. (FF 23, 44.) Pursuant to the District's directive following its rescission of the two-block restriction, the Appellant submitted Revised Schedule #3 on March 7, 2006. However, as the expert determined based upon the as-built data, the contract was already delayed by 140 days at the time that Civil was told to submit this revised schedule in connection with the

[40] Though we use the term "delay" in discussing the time extension that the Appellant is entitled to, we reiterate that the Appellant's entitlement derives from the Changes Clause.

rescission of the two block restriction. (FF 44-45.) Therefore, as a preliminary matter, the Appellant attributes an initial 140 day delay to the District's Change Order requirement.

As described herein, the District's consultant issued the Alpha Report which rejected the Appellant's Revised Schedule #3 and, alternatively, asserted that the project was only delayed by 90 days, up until February 22, 2006, as the result of the Change Order. (FF 23.) This assessment by Alpha of only a 90 delay appears to be the basis for the formal change order granting Civil a 90 day extension of time, and $204,000.00 in delay costs associated with the Change Order. (FF 25, 33.) The District, however, provided no further testimony or evidence to support the conclusory statements in the Year 2006 Alpha Report, which appears to be the only basis for limiting Civil's recovery for compensable delay days arising from the Change Order. Moreover, we find merit to the expert's findings that the Alpha Report was flawed in that it did not adhere to Civil's original sequencing of work in determining the extent of the delay caused by the two-block restriction. While the Appellant was to perform underground utility work prior to any street-level work under its original phasing plan, the Alpha Report scheduled utility and street-level work concurrently. (FF 4, 45.) The Appellant's expert, on the other, reviewed the Appellant's Revised Schedule #3 and established a projected, remaining schedule for the project which restored the original sequence of work activities. (*See* FF 45.) We, therefore, accept the Appellant's contention that the contract was delayed 140 days by the District by the time it was asked to prepare a new schedule after the District rescinded the two-block restriction.

The Alpha Report also suggested that Civil may have concurrently delayed the project, but the District provided no further evidence or testimony at the hearing to support this claim. (Appellant's Hr'g Ex. 17 at 182.) Because concurrent delay is in the nature of an affirmative defense, the District bears the burden of establishing a concurrent delay. *MCI Constructors, Inc.*, CAB No. D-924, 44 D.C. Reg. 6444, 6458 (June 4, 1996). The Alpha Report's purely speculative suggestion regarding a contractor caused delay is insufficient to establish a concurrent delay defense. *John Driggs Co.*, ENGBCA Nos. 4926 et al., 87-2 BCA ¶ 19,833 (May 18, 1987).

In addition to the 140 days of delay caused by the District, and as discussed above, we also agree with the Appellant's expert in attributing an additional 14 days of delay to the two-block restriction to reflect the period that the District prevented Civil from fully mobilizing on the project by first requiring that it develop and submit Revised Schedule #3 to the District after the two-block restriction was rescinded. (FF 46.) Despite the CO's testimony to the contrary, (FF 71,) a plain reading of CO's January 19, 2006, letter rescinding the two-block restriction shows that Civil was required to submit a revised schedule to the District before progressing forward with work on the 1700 block of F Street. (FF 18.) Civil submitted its revised schedule on March 7, 2006. (FF 19.) There is no allegation by the District that Civil unduly delayed in submitting its schedule.

The Appellant also claims 14 additional delay days due to adverse weather conditions that occurred during the extended period that Civil was required to work on the project because of District-caused delays. (FF 48, 50.) Where government-caused delays push a contractor into periods of adverse weather, the contractor may recover damages for such weather delays. *J.D. Hedin Constr. Co. v. United States*, 347 F.2d 235, 253-55 (Ct. Cl. 1965); *DTC Engineers & Constructors, LLC*, ASBCA No. 57,614, 12-1 BCA ¶ 34,967 (Mar. 9, 2012); *Charles G.*

Williams Constr., Inc., ASBCA No. 42,592, 92-1 BCA ¶ 24,635 (Dec. 9, 1991). We have already found that the two-block restriction delayed the F Street Project and pushed back the completion date until September 25, 2006. The Appellant presented evidence through its expert establishing that it was delayed for 11 days due to adverse weather between the original May 8, 2006, completion date and the new projected completion date of September 25, 2006. (FF 48 note 15.) These weather impacts were corroborated by the daily inspector report which were presented by the Appellant and made part of the record at trial.[41] We, however, find that the expert's opinion that the Appellant should be granted an additional 2 days of delay for weather because of the need to convert 4 individual weather impact days—May 15, 2006, June 12, 2006, and July 5-6, 2006—from workdays to calendar days is unfounded. The delay period in this matter is being calculated based upon calendar days and, thus, there is no basis for creating a distinction, and additional recovery, to the Appellant by creating an additional conversion based upon any of the 11 weather impact days which the Board has recognized herein as a District caused delay. We also find that the District's Change Order is not the proximate cause of the November 8, 2006, weather delay as the Appellant offered no meaningful evidence that this was the case.

Additionally, we find that the Appellant is further entitled to an additional day of delay resulting from the July 10, 2006, switch from the north to the south side of F Street. The Appellant originally planned to complete all work on the north side before switching to the south side. (FF 4.) Due to the two-block restriction, on or about September 8, 2005, Civil shifted from the north to the south side between 23rd and 21st Streets. (FF 16.) But for the two-block restriction, the Appellant would not have incurred the additional July 10, 2006, delay day resulting from this switch.

In summary, the Board finds that the Appellant is entitled to 166 compensable days of delay resulting from the two-block restriction. We accept: (1) the Appellant's attribution of 140 days of delay, through February 22, 2006, to the District; (2) the additional 14 days of delay between February 22 and March 7, 2006, resulting from the schedule restriction on the Appellant prior to commencing work on the 1700 block of F Street; (3) 11 days for the Appellant's claim of weather delay; and (4) the Appellant's claim of 1 day of delay for the July 10, 2006, additional switch from the north to south side of F Street. The Board finds that these are the only delay days which the Appellant has proven are attributable to the actions of the District.

Delay Damages

Equitable adjustments are corrective measures that serve to keep a contractor whole when the District modifies a contract. *Perdomo & Assocs., Inc.*, CAB No. D-802, 41 D.C. Reg. 3898, 3908 (Jan. 10, 1994); *Grunley Constr., Inc.*, CAB No. D-910, 41 D.C. Reg. 3622, 3638 (Sept. 14, 1993). An equitable adjustment should reflect "the difference between what it would have reasonably cost to perform the work as originally required and what it reasonably cost to perform the work as changed." *District of Columbia v. Org. for Envtl. Growth, Inc.*, 700 A.2d 185, 203 (D.C. 1997); *Gilbane-Smoot/Joint Venture*, CAB No. D-885, 40 D.C. Reg. 4954, 4983 (Feb. 18, 1993). The Board has held that this requires that the contractor's costs be reasonable; however, the standard of reasonable costs must be viewed in light of the particular contractor's costs.

[41] *See* Appellant's Hr'g Ex. 24 at 253-61.

Grunley Constr., Inc., CAB No. D-910, 41 D.C. Reg. at 3639. The party claiming entitlement to an equitable adjustment has the burden of proving the amount to which it is entitled. *Org. for Envtl. Growth*, 700 A.2d at 203; *Reliable Contracting Grp., LLC v. Dep't of Veterans Affairs*, CBCA No. 1539, 11-2 BCA ¶ 34,882 (Nov. 16, 2011). The party must prove the amount with sufficient certainty such that the determination of the amount will be more than mere speculation. *Reliable Contracting*, CBCA No. 1539, 11-2 BCA ¶ 34,882. While the proof of damages need not be exact, some convincing, reasonable basis must be advanced. *Twigg Corp. v. Gen. Servs. Admin.*, GSBCA Nos. 14,386 et al., 00-1 BCA ¶ 30,772 (Feb. 11, 2000).

The preferred method of establishing the amount of an adjustment is through the submission of actual costs. *Org. for Envtl. Growth*, 700 A.2d at 203; *Perdomo & Assocs.*, CAB No. D-802, 41 D.C. Reg. at 3908. However, where the contractor does not accumulate actual cost data and the actual costs attributable to a change cannot be reasonably identified, the contractor may use estimates to quantify its increased costs. *Perdomo & Assocs.*, CAB No. D-802, 41 D.C. Reg. at 3908; *Reliable Contracting*, CBCA No. 1539, 11-2 BCA ¶ 34,882; *Envtl. Safety Consultants, Inc.*, ASBCA No. 53,485, 05-1 BCA ¶ 32,903 (Mar. 8, 2005). The Appellant's Amended Complaint lists 6 areas of costs. (FF 40.) We address each *ad seriatim*.

a. Labor

As discussed herein, the Appellant's expert report and testimony established the ongoing impact resulting from the two-block restriction mandated by the May 19, 2005, Change Order. These facts were also corroborated by the testimony of the Appellant's witnesses, Steve Salehi and John Constantino. In totality, the facts confirm for the Board that the District imposed the two-block restriction at the very start of the performance period. (FF 7-9.) The Change Order did not change the work to be done, but it altered the way that Civil was allowed to perform the required work. (FF 3, 5-6, 9, 11.) Rather than working on 6 blocks concurrently as planned, the two-block restriction added inefficiencies resulting in multiple additional demobilizations. (FF 6, 11.) The expert's report explains that the general difficulty in establishing actual labor costs for this project arises when attempting to determine whether specific periods of labor should be viewed as deriving from the original contract work or from the two-block restriction. (FF 53.) In this regard, the expert report provided several reasons why Civil was unable to calculate its actual labor costs arising from the two-block restriction, largely due to inefficiencies in the manner in which work was performed because of the Change Order requirements. (Appellant's Expert Report 20.)

In light of the lack of information on actual labor costs incurred on the project, the Appellant's expert prepared an estimate of the increased labor costs resulting from the delay period. (FF 53-54.) The Appellant's expert derived the estimate by taking the total as-bid labor costs divided by 350 days to arrive at a daily rate, which he then multiplied by the number of delay days that the expert found that the Appellant had incurred due to the actions of the District. (FF 54.) The Board has previously held that the computation of daily rates is a recognized measure of direct costs where it is impractical to derive actual cost data. *MCI Constructors*, CAB No. D-924, 44 D.C. Reg. at 6462-64.

The Board finds that the formula which the expert applied in this case to derive an appropriate daily labor rate was acceptable given the lack of actual cost data related to additional

labor hours incurred by the Appellant as a result of the two-block restriction. However, the Board finds that the expert's use of 350 days instead of 365 days as the originally planned contract performance period is an inaccurate baseline for the formula. In this regard, we find that utilizing the full original contract term is a fairer measure of the Appellant's costs. Using the 365 days originally allotted for Civil's contract performance, we derive a burdened labor daily rate of $1,938.57,[42] which should be multiplied by the compensable delay period (166 days) caused by the District to calculate the additional, and total, labor compensation to which Civil is entitled to recover from the District. Accordingly, the District shall compensate the Appellant $321,802.62 for additional labor costs incurred by the Appellant due to the Change Order.

b. Equipment

Similarly, based upon the delays caused by the District on this project, the expert derived a daily rate for the Appellant's equipment costs by using Civil's as-bid daily equipment rate costs as a baseline for this methodology. A contractor is entitled to recover additional equipment costs incurred in performing work for an additional period beyond what it would have had to perform but for a government-caused delay. *MCI Constructors*, CAB No. D-924, 44 D.C. Reg. at 6464. The Appellant's expert estimated its daily equipment rate to be $1,141.72 for the delay period by using Civil's as-bid daily equipment rate as the baseline for this calculation, but then adjusting that rate to account for time during which the project equipment would be in use or idle. (FF 56.)

In the case of the Appellant's project equipment, however, the Appellant introduced evidence at the hearing that showed the actual equipment costs that it incurred for the project. Specifically, the Appellant's own cost accounting data shows that throughout the project Civil incurred $591,499.00 in equipment costs and its Project Superintendent testified at the hearing that these were, in fact, its actual equipment costs. (FF 57.) As noted above, the actual cost method is the preferred method of proving the amount of an adjustment. *Org. for Envtl. Growth*, 700 A.2d at 203. The actual cost method provides the Board with a contractor's documented expenses and therefore ensures that the amount of an adjustment is equitable and not a windfall for the contractor or government. *Advanced Eng'g & Planning Corp.*, ASBCA Nos. 53366, 54044, 05-1 BCA ¶ 32,806 (Nov. 19, 2004) (citing *Dawco Constr., Inc. v. United States*, 930 F.2d 872, 882 (Fed. Cir. 1991)). While using estimates is an acceptable method, estimates are generally only accepted in the absence of actual cost data. *Bergman Constr. Corp.*, ASBCA No. 15,020, 72-1 BCA ¶ 9411 (Apr. 13, 1972) ("[E]stimates are a preferred method of pricing equitable adjustments only where actual costs are not available."); *see also Reliable Contracting*, CBCA No. 1539, 11-2 BCA ¶ 34,882 (noting that "evidence of actual costs is more compelling proof of damages" than estimated costs). Accordingly, actual costs should be used where available. *See Advanced Eng'g & Planning Corp.*, ASBCA Nos. 53366, 54044, 05-1 BCA ¶ 32,806 (accepting the contractor's estimate for a portion of its claim, but using actual cost rates derived from a DCAA audit where such rates were provided); *see also Bergman Constr. Corp.*, ASBCA No. 15,020, 72-1 BCA ¶ 9411 (rejecting both contractor and government estimates where the estimates did not conform to the available actual cost data).

[42] We arrived at this figure by dividing the $707,576.86 in as-bid labor costs (*see supra* note 24) by the original 365 day duration of the project.

Because actual cost data is available to establish the Appellant's actual equipment costs, we reject its alternative methodology for determining a daily equipment rate based upon the Appellant's as-bid equipment rate. We believe that the actual cost rate is the proper measure in determining Civil's increased equipment costs over the delay period. Consequently, in order to derive the most accurate equipment daily rate, the Appellant's total equipment costs ($591,499.00) must be divided by the entire 591 day duration of the project, which establishes that Civil incurred a daily equipment cost rate of $1,000.84 for the delay period of the contract. Therefore, the Appellant is entitled to recover from the District its equipment costs that it incurred based upon the foregoing equipment rate of $1,000.84 as multiplied by the delay period (166 calendar days) caused by the District on this project. As a result, the District shall compensate the Appellant in the amount of $166,139.44 for these additional equipment costs, which the District caused the Appellant to incur due to the Change Order.

c. Scheduling

The Appellant is not entitled to any additional compensation arising from scheduling costs. The Appellant originally planned on submitting 12 schedules to the District at a cost of $450.00.00 per schedule, or $5,400.00 total. (FF 59.) This function appears to have been satisfied by the Appellant's subcontractor Contractors Engineering Services, which submitted 12 invoices for scheduling services concurrent with Civil's contract performance at a cost of $6,790.00. (FF 58.) The fact that the Appellant may have underestimated its scheduling costs, by not accounting for typical contract changes, cannot be a basis for shifting the resulting loss to the District. *See Org. for Envtl. Growth*, 700 A.2d at 203.

Additionally, the Appellant has not shown that the scheduling services provided by McDonough Boyland Peck were required under the contract. Rather it appears that McDonough was retained in order to prosecute the present appeals. McDonough was not retained until August 2006, well into Civil's performance under the F Street contract and after the CO's final decision. (FF 58.) The first invoice was for $10,000.00, a sum substantially greater than the total amount charged by Contractors Engineering Services. (FF 58.) Moreover, McDonough employs the Appellant's expert. (FF 58.) Professional fees incurred in prosecuting an appeal from a contracting officer's final decision are not allowable costs. *See MCI Constructors*, CAB No. D-924, 44 D.C. Reg. at 6469. Therefore, the Board determines that Civil may not recover for services provided by McDonough Boyland Peck in prosecuting these appeals.

d. Field Overhead

Field overhead costs, also referred to a jobsite overhead or general conditions costs, are direct costs that can be attributed to the performance of a specific contract. *AMEC Constr. Mgmt., Inc. v. Gen. Servs. Admin.*, GSBCA No. 16,233, 06-1 BCA ¶ 33,177 (Jan. 24, 2006); *Young Enters. of Ga., Inc. v. Gen. Servs. Admin.*, GSBCA No. 14,437, 00-2 BCA ¶ 31,148 (Oct. 19, 2000). We have stated that one way to measure such costs is to divide the total general conditions costs incurred on a project by the total number of days on the project in order to derive a daily rate, and then multiply the number of compensable days by the daily rate. *MCI Constructors*, CAB No. D-924, 44 D.C. Reg. at 6464. Using this approach, the Appellant's expert determined that the Appellant was entitled to recover at a daily rate of $1,307.49. (FF

61.) The Board, however, finds that a portion of the Appellant's claim field overhead costs are unsubstantiated and, therefore, do not support recovery at the foregoing daily rate.

The Appellant's expert, in calculating the field overhead rate, found that Civil had incurred a total of $43,371.41 including field office rent cost ($31,959) and field office supplies and phone costs ($11,412.41) for a total field office overhead cost of $43,371.41. (FF 61 note 26.) Notwithstanding, the actual company back-up cost data provided by Civil, and relied upon by the expert, to support these field office overhead costs total an amount higher than what the expert included in the expert report for these same costs items ($44,165.50). (FF 62.) The expert acknowledged this cost discrepancy between his expert report and Civil's internal back-up data, but never explained or reconciled these differing costs so that his report could be fully substantiated on this issue at the hearing:

> And if I look at Page 3 of the Job Cost Detailed Transaction Report, the total shows $44,165.50 which is a little bit more than the $43,371.41 shown in my report. So, presumably there are things in here that were not included in my calculation.

(Hr'g Tr. 475:12-17)

Thus, given the Appellant's failure to clarify the discrepancy between its internal cost records and the ultimate amount set forth in the expert report for its field office overhead costs in the amount of $43,371.41, the Appellant failed to meet its burden of showing the accuracy of these particular costs, which it allegedly incurred.

In order to substantiate its extended field overhead costs, the Appellant also provided the Board with evidence of the payroll costs for project supervision which it incurred for the F Street Project in the amount of $580,457.60, as well as its costs for a field safety officer in the amount of $27,338.11. (FF 62.) The Appellant's Chief Financial Officer provided extensive testimony to explain the basis for these payroll calculations and the total of $607,795.71, which it incurred in field safety officer and field supervision costs, which the Board accepts as valid.[43] (FF 62.) The Board, however, finds that the 20 percent markup, which the Appellant's expert applied to these field safety officer and supervision costs is unallowable as it would improperly result in double recovery to the Appellant based upon the separate overhead recovery being granted to the Appellant below. Dividing the $607,795.71 in field supervision costs by the 591 days of total duration of the F Street Project, we find that the Appellant is entitled to recover from the District its field overhead costs at a daily rate of $1,028.42, which should be multiplied by the 166 days attributable to the District to calculate the total field overhead costs, for which the Appellant is entitled to be compensated by the District. Consequently, the District shall compensate the Appellant in the amount of $170,717.72 for these additional field overhead costs, which the District caused the Appellant to incur due to the Change Order.

[43] While the Appellant did not formally introduce its payroll summary document (Appellant's Hr'g Ex. 35) into evidence at the hearing, it was clearly its intention to do so. Moreover, prior to allowing Appellant's Chief Financial Officer to testify regarding the substance of this document, the Board heard and overruled the District's objections to this document being introduced and relied upon by the Appellant at the hearing for purposes of meeting its burden of proof. (Hr'g Tr. 310:17-322:19) For these reasons, the Board hereby admits the document into the record.

e. Extended Home Office Overhead

1. The Notice Requirement of the Changes Clause Does Not Preclude the Appellant from Recovering Extended Home Office Overhead

The Appellant's claims in D-1413 and D-1417 seek recovery of its home office overhead costs during the extended performance period. (FF 37-38.) The District argues that the Appellant should be barred from recovery because the claims were submitted more than 5 years after the May 19, 2005, Change Order was issued and therefore the Appellant violated the notice requirement of the changes clause. (Dist. Post Hr'g Br. 19-20.)

It is well settled in government contract law that notice provisions are read liberally and will not bar a contractor's claim unless the government is prejudiced by the late notice. *See, e.g.*, *Walsh/Davis Joint Venture v. Gen. Servs. Admin.*, CBCA No. 1460, 11-1 BCA ¶ 34,737 (Apr. 11, 2011); *Flathead Contractors, LLC*, AGBCA Nos. 2005-130-1, 2005-131-1, 06-1 BCA ¶ 33,174 (Jan. 18, 2006); *Grumman Aerospace Corp.*, ASBCA Nos. 48,006 et al., 03-1 BCA ¶ 32,203 (Mar. 14, 2003); *Powers Regulatory Co.*, GSBCA Nos. 4468 et al., 80-2 BCA ¶ 14,463 (Apr. 30, 1980). The government bears the burden of establishing that it was prejudiced; this burden cannot be met by mere allegation but must be supported by evidence in the record. *Grumman Aerospace*, ASBCA Nos. 48,006 et al., 03-1 BCA ¶ 32,203; *see also Walsh/Davis*, CBCA No. 1460, 11-1 BCA ¶ 34,737 ("the claim will be heard unless the Government can prove it was prejudiced by the late notice"); *Big Chief Drilling Co. v. United States*, 15 Cl. Ct. 295, 303 (1988) ("the government has the burden of proving that the untimeliness caused prejudice to its case"). This Board has adopted this federal standard regarding the interpretation of notice requirements. *Org. for Envtl. Growth*, CAB No. D-850, 49 D.C. Reg. 3353, 3354 (Apr. 13, 2001), *rev'd on other grounds*, 806 A.2d 1225 (D.C. 2002).

In the seminal case of *Hoel-Steffen Construction Co. v. United States*, the Court of Claims stated that to adopt a "severe and narrow application of the notice requirements … would be out of tune with the language and purpose of the notice provisions, as well as [a] concern that notice provisions … not be applied too technically and illiberally where the Government is quite aware of the operative facts." 456 F.2d 760, 767-68 (1972). Accordingly, the government can be placed on notice where the contracting officer has actual or imputed knowledge of the pertinent facts. *See CATH-dr/Balti Joint Venture*, ASBCA Nos. 53,581, 54,239, 05-2 BCA ¶ 33,046 (Aug. 17, 2005); *A.R. Mack Constr. Co.*, ASBCA No. 50,035, 01-2 BCA ¶ 31,593 (Sept. 18, 2001).

The Board finds that the District was on notice of the Appellant's claims in two ways. First, soon after the Appellant had placed concrete barriers along the entire six blocks of the F Street Project, the neighboring community began objecting to the anticipated disruption the construction would cause. (FF 8-9.) In response to the complaints, the CO imposed the two-block restriction, specifically citing the Changes Clause. (FF 9.) Therefore, the District knew (or at least should have known) that it was altering the Appellant's sequence of work, which could give rise to a claim. Indeed, within five days of the CO's imposition of the two-block restriction, the Appellant furnished the CO with written notice that the change would materially alter the nature of the project and drastically increase costs and requested a formal change order to reflect the additional costs. (FF 10.) This notice was followed by a July 15, 2005, estimate of

costs arising from the two-block restriction, in which the Appellant estimated that direct costs would increase by $2,375,275.18. (FF 12-13.) Though the Appellant stated that extended home office costs were not included in the estimate, (FF 13,) the Appellant did not waive its right to recover those costs.

Further, assuming *arguendo* that the Appellant was required to specifically notify the District that it was seeking extended home office overhead costs, the District has not alleged, much less shown, any prejudice. In the formal modification issued three days after his final decision, the CO stated that the $204,000.00 in additional compensation included unabsorbed home office costs. (FF 34.) At the hearing, the CO reiterated that the $204,000.00 he awarded to the Appellant included extended overhead costs. (FF 72.) Absent any prejudice to the District, the Appellant is not precluded from asserting its claims for extended overhead costs in this action.

2. The Eichleay Formula is Not the Appropriate Method of Determining the Appellant's Recoverable Extended Overhead Costs

The Appellant seeks to recover its unabsorbed home office overhead costs for the extended project period pursuant to the Eichleay formula. (FF 37-38, 63.) The Eichleay formula was first introduced by the Armed Services Board of Contract Appeals in *Eichleay Corp.*, ASBCA No. 5,183, 60-2 BCA ¶ 2,688 (July 29, 1960). The Eichleay formula allocates overhead costs "pro-rata because they cannot ordinarily be charged to a particular contract." *Wickham Contracting Co. v. Fischer*, 12 F.3d 1574, 1579 (Fed. Cir. 1994) (citing *Eichleay Corp.*, ASBCA No. 5,183, 60-2 BCA ¶ 2,688) (quotation marks omitted). Use of the Eichleay formula is appropriate where a government caused-delay has "reduced the stream of direct costs in a contract." *C.B.C. Enters., Inc. v. United States*, 978 F.2d 669, 674 (Fed. Cir. 1992).

However, the Eichleay formula does not automatically apply to all claims for unabsorbed or extended home office overhead costs. Rather, both the Board and the Federal Circuit have held that a contractor must satisfy certain prerequisites before the Eichleay formula may be applied. *See, e.g., MCI Constructors, Inc.*, CAB No. D-924, 44 D.C. Reg. 6444; *Melka Marine, Inc. v. United States*, 187 F.3d 1370 (Fed. Cir. 1999); *P.J. Dick, Inc. v. Principi*, 324 F.3d 1364 (Fed. Cir. 2003). For example, in *MCI Constructors*, the Board held that in order to justify using the Eichleay formula for calculating its daily rate of unabsorbed home office expenses, a contractor must show that: "(1) the government has caused a compensable delay or suspension; (2) the delay or suspension interrupts or reduces the stream of income from payments for contract direct costs; and (3) it was unable to absorb a fair share of its home office overhead costs during the delay or suspension period."[44] *MCI Constructors*, CAB No. D-924, 44 D.C. Reg. 6444 at 6456. Similarly, the Federal Circuit has held that calculating extended home office overhead costs using a daily rate, pursuant to the Eichleay formula, is an "extraordinary remedy which is specifically limited to contracts affected by government caused suspensions, disruptions and delays of work." *C.B.C. Enters.*, 978 F.2d at 675.

[44] The Board notes, however, that, in the past, it has not consistently analyzed whether the above (or similar elements) have been met before applying the Eichleay formula to calculate a contractor's unabsorbed home office costs. *See, e.g., Prince Constr. Co., Inc.*, CAB No. D-1127, 50 D.C. Reg. 7498 (May 12, 2003); *A.A. Beiro Constr. Co.*, CAB No. D-822, 50 D.C. Reg. 7349 (Jan. 3, 2002).

In the years since *MCI Constructors*, the Federal Circuit has held that, "before using the Eichleay formula to *quantify damages*," the contractor must meet three prerequisites.[45] *Nicon, Inc. v. United States*, 331 F.3d 878, 883 (Fed. Cir. 2003) (emphasis added). First, the contractor must show that there was a government-caused delay of uncertain duration. *Id.*; *Melka Marine*, 187 F.3d at 1375. Second, the contractor must also show that the delay extended the time of performance (or alternatively that it incurred additional costs because it would have completed its performance earlier). *P.J. Dick*, 324 F.3d at 1370. Third, the contractor must show that it was required to remain on standby, and thus unable to take on additional work to mitigate damages. *Melka Marine*, 187 F.3d at 1375; *Interstate Gen. Gov't Contractors, Inc. v. West*, 12 F.3d 1053, 1056 (Fed. Cir. 1993). Where the contractor makes a *prima facie* showing that it meets these prerequisites the burden of production shifts to the government to show that "it was not impractical for the contractor to take on replacement work." *P.J. Dick*, 324 F.3d at 1370; *Melka Marine*, 187 F.2d at 1375.

Although neither party questions the propriety of using the Eichleay formula, the Board finds it inappropriate to use the Eichleay formula to calculate the Appellant's recoverable overhead costs. Specifically, the Appellant fails to meet the third prerequisite for using the Eichleay formula—that is, the standby prong. The Federal Circuit has stated that the standby prong, properly understood, focuses on "suspension of work on the contract." *Interstate Gen.*, 12 F.3d at 1057. Here, the record shows that while work was delayed due to the Change Order, it does not show that the Appellant was forced to suspend performance.[46] In addition, the Appellant has not alleged that it was required to standby for any indefinite extended period of time as a result of the District's May 19, 2005, Change Order. Rather, the Appellant asserts that at no point did it stop work on the contract. (FF 27.) When a contractor continues to perform a substantial amount of work on a contract, the contractor is not on standby and use of the Eichleay formula is improper. *P.J. Dick*, 324 F.3d at 1373-74. Accordingly, use of the Eichleay formula here is inappropriate.

The Eichleay formula is simply a method of allocating overhead costs and is not a matter of legal entitlement. *Nicon*, 331 F.3d at 889 (Newman, J., concurring); *see also id.* at 883 (discussing the use of the Eichleay formula to *quantify* damages). Where a contractor meets the Eichleay prerequisites, the Eichleay formula is the exclusive method for calculating extended home office overhead costs.[47] *Young Enters.*, GSBCA No. 14,437, 00-2 BCA ¶ 31,148 (citing *Melka Marine*, 187 F.3d. at 1374-75; *Wickham Contracting*, 12 F.3d at 1574). But, where contract changes do not require a contractor to suspend work, the contractor may recover a fixed percentage markup of direct costs incurred. *Cmty. Heating & Plumbing Co. v. Kelso*, 987 F.2d 1575, 1581-82 (Fed. Cir. 1993).

[45] This number has varied somewhat between cases, though there is broad agreement as to the particulars. For example, *P.J. Dick*, *supra*, expands the three elements to four, while *Melka Marine*, *supra*, compresses the analysis to a mere two elements.

[46] On the contrary, Appellant worked on duct banks for both GWU and GSA concurrently with portions of the F Street Project. (FF 28-29)

[47] The language of some Federal Circuit decisions suggests greater exclusivity in using the Eichleay formula. *See, e.g.*, *Melka Marine*, 187 F.3d at 1374-75 ("The Eichleay formula is the only means approved in our case law for calculating recovery of unabsorbed home office overhead."); *Wickham Contracting.*, 12 F.3d at 1575 (the Eichleay formula "is the only proper method of calculating unabsorbed home office overhead. No other formula may be used."). We note, however, that this language is to be read "in light of the factual context in which they arose." *Nicon*, 331 F.3d at 884.

While we have used the term "delay" as a term of convenience throughout this opinion, the Appellant's entitlement to additional costs derives from the Changes Clause of the contract; and our granting the Appellant an additional 166 days is a pure contract extension. With regard to pure contract extensions, use of a percentage markup to calculate recoverable overhead costs is appropriate.[48, 49] *See Cmty. Heating & Plumbing*, 987 F.2d at 1582; *Program & Constr. Mgmt. Grp., Inc. v. Gen. Servs. Admin.*, GSBCA No. 14,149, 99-2 BCA ¶ 30,579 (Sept. 30, 1999) (citing *C.B.C. Enters.*, 978 F.2d 669), *aff'd on reconsideration*, 00-1 BCA ¶ 30,771 (Jan. 27, 2000). Therefore, we grant the Appellant's entitlement to also recover a reasonable percentage markup on its direct costs, as recoverable overhead, and remand the issue of quantum for these overhead costs to the parties to negotiate a reasonable fixed percentage markup formula according to which the Appellant shall be compensated by the District.

Subcontractor Claims

1. Central Armature Works Has Failed to Demonstrate Its Claimed Costs

The Appellant has failed to prove the amount to which it is entitled in regard to the Appellant's claim on behalf of Central Armature. The Appellant seeks $15,696.85 in recovery, which is a downward adjustment from $19,215.11, consistent with Appellant's days of delay. (FF 64.) This $19,215.11 figure is, in turn, a downward adjustment from Central Armature's original $101,582.00 July 6, 2005, estimate. (FF 65.) During its testimony, Central Armature was unable to provide the Board with details on how any of these amounts were calculated or what cost factors were included in these calculations. For this reason, the Board finds that the Appellant's claim for costs on behalf of Central Armature are unsubstantiated and cannot be a basis for recovery in this matter.

2. *The District is Not the Cause of Fort Myer's Claimed Costs.*

With regard to the Appellant's claim on behalf of Fort Myers, the Board notes that the Appellant did not enter into its subcontract with Fort Myer until August 12, 2005, almost three months after the District's May 19, 2005, Change Order, yet it did not incorporate the Change Order into this subcontract. (FF 15.) Information pertaining to the Change Order was available to Fort Myer before it executed its subcontract agreement with the Appellant so as to put it on notice that the Contract had been modified to include a two-block restriction on construction work. Nonetheless, Fort Myer's inexplicably appears to have negotiated subcontractor rates with the Appellant based upon a minimal number of mobilizations and demobilizations that obviously did not account for the Change Order that was issued by the District several months earlier.

[48] In at least one previous decision, the Board has allowed a contractor to recover overhead costs of 10%, using a fixed percentage markup of direct costs. *See A.A. Beiro Constr. Co., Inc.* CAB No. D-822, 40 D.C. Reg. 4574 (Oct. 15, 1992) (granting appellant a 10% fixed markup for overhead). Similarly, the ASBCA has allowed home office overhead costs ranging from 5.87 to 12.3%. *See, e.g., Fru-Con Constr. Corp.*, ASBCA No. 55197, 07-2 BCA ¶ 33,197 (October 4, 2007) (upholding a home office overhead rate of 5.87% as reasonable on appeal); *C.E.R., Inc.*, ASBCA No. 41767, 96-1 BCA ¶ 28,029 (October 30, 1995) (finding that a 10% fixed overhead markup was more appropriate for calculating extended overhead costs than the Eichleay formula); *Haskell Corp.*, ASBCA Nos. 54262, 54263, 06-2 BCA ¶ 33,422 (October 19, 2006) (granting home office costs of 12.3%).

[49] Here, the Appellant's requested Eichleay overhead costs of $205,523.58 represent approximately 19.9% of Appellant's total requested adjustment of $1,033,014.61. (FF 40.) However, the addition of $205,523.58 in home office overhead to the $658,659.78 already granted by the Board would represent a markup of approximately 31.2%.

Thus, the Board finds that it was the failure of Fort Myer and the Appellant to negotiate and execute a subcontract based upon the revised contract terms that resulted in any alleged additional costs claimed by Fort Myer from additional mobilizations/demobilizations as opposed to the actions of the District in issuing the Change Order.

Additionally, the Board denies Fort Myer's claim because Fort Myer failed to prove its costs. Fort Myer provided unit pricing for its subcontract, which incorporated the costs of mobilizations. (FF 15.) However, Fort Myer's August 23, 2007, Request for Equitable Adjustment sought to recover the costs for additional mobilizations, as well as other costs. (FF 36, 67-68.) At the hearing, Fort Myer attempted to substantially increase its costs through calculations performed on the witness stand, purportedly on the basis of newly audited costs. (FF 69-70.) However, Fort Myer did not provide the detailed underlying cost data to sufficiently verify its most current estimates, nor did Fort Myer provide testimony to prove the accuracy of its allegedly audited costs to meet its burden of proof. Accordingly, we deny Fort Myer's claim.

CONCLUSION

The record in this matter unequivocally establishes that, at the outset of the F Street Project, the District issued a Change Order that significantly altered the manner and sequence in which the Appellant was able to perform the contract work, as compared to the original contract requirements. The District's Change Order delayed the project by 166 days. The Change Order also caused damages to the Appellant beyond what the District had previously granted and paid to the Appellant in connection with the Change Order. Consequently, the District is hereby ordered to compensate the Appellant in the amount of $658,659.78 for Appellant's additional labor, equipment, and field overhead costs. This amount shall be used as the basis for the parties' negotiation of Appellant's extended home office overhead costs, which shall be calculated as a reasonable percentage markup to the above amount. The District may then deduct any damage amount previously paid to the Appellant in connection with the Change Order in calculating the remaining damage amount still owed to the Appellant pursuant to this Order. The District shall also pay the Appellant interest, in accordance with D.C. CODE § 2-359.09 (2011) (formerly D.C. CODE § 2-308.06), on any outstanding amounts required to be paid to the Appellant in connection with this award of damages by the Board.

SO ORDERED.

DATED: March 14, 2013

/s/ Monica C. Parchment
MONICA C. PARCHMENT
Administrative Judge

CONCURRING:

/s/ Marc D. Loud, Sr.
MARC D. LOUD, SR.
Chief Administrative Judge

/s/Maxine E. McBean
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