

ARMED SERVICES BOARD OF CONTRACT APPEALS

Appeal of -- )  
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States Roofing Corporation ) ASBCA No. 55508  
)  
Under Contract No. N62470-97-C-8319 )  
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OPINION BY ADMINISTRATIVE JUDGE PARK-CONROY

This is another of 11 appeals arising from Contract No. N62470-97-C-8319 awarded to appellant States Roofing Corporation (SRC) by the Navy for repairs and related work on the roof cells at Building W-143, Naval Operating Base (NOB), Norfolk, VA. We previously issued decisions in ASBCA No. 54854, 08-2 BCA ¶ 33,912, ASBCA No. 55506, 08-2 BCA ¶ 33,970, ASBCA Nos. 55500, 55503, 09-1 BCA ¶ 34,036, and ASBCA No. 55507, 2009 ASBCA LEXIS 14, from which we incorporate relevant findings and conclusions. At issue here is the quantum of a contract change deleting work on Roof Cells D and F.

FINDINGS OF FACT

By an e-mail letter dated 24 April 2001, LT Darren R. Hale, USN, the Assistant Resident Officer in Charge of Construction (AROICC), advised SRC of a proposed change to the contract deleting all work on Roof Cells D and F, except “the flashing system on the parapet walls,” “all work associated with the penthouses,” and the “expansion joints between cells ‘B’ and ‘D’ as well as between ‘F’ and ‘H’” (R4, tab 67). The letter requested a cost proposal for the deductive change and directed SRC not to purchase any more roof insulation or crickets for Roof Cells D and F (*id.*). SRC responded on 26 April 2001 that the proposed change represented 22 percent of the built-

up roofing (BUR) area and that the cost of the work and materials was dependent upon the volume. It further advised that materials previously purchased might not be returnable or might be subject to a restocking fee. (R4, tab 70)

On 9 May 2001, SRC sent a letter to the ROICC seeking an “official order” confirming the deletion of Roof Cells D and F (supp. R4, tab 297). LT Hale responded on 14 May 2001 that Roof Cell D would be deleted and that Roof Cell F “will most likely be deleted, but will be determined when the government receives the credit proposals for these [roof cells]” (R4, tab 74).

#### *SRC’s 15 May 2001 Proposal*

On 15 May 2001, SRC submitted a credit proposal in the amount of \$249,064 for the work it understood would be deleted from Roof Cells D and F based upon the information that had been provided (tr. 9(2)<sup>1</sup>/18). The proposal did not include work that had already been accomplished (tr. 9(2)/113). It consisted of 34 separate line items, most with material and labor subparts. (Supp. R4, tab 388, subtab 55 at 2-4)

The credit proposal included the cost of materials that had been or would have been purchased for Roof Cells D and F in the total amount of \$90,730. SRC gave the Navy full credit for most of the materials that had already been purchased because SRC was able to use them on other projects, including 40 tons of asphalt, at \$11,320, and 117 tons of gravel, at \$2,340, for the new BUR. Credit was also given for materials that would have been purchased based upon SRC’s bid or estimates prepared by Mr. Hugh DeLauney, SRC’s president. (Supp. R4, tab 388, subtab 55 at 2, 4; tr. 9(2)/16-17) The 15 May 2001 proposal deducted a 25% restocking fee from the credit for the cost of the tapered insulation, crickets and the “4-ply” BUR material, the later of which was estimated at a total of \$4,243 (supp. R4, tab 388, subtab 55 at 4; tr. 9(2)/104-06, 142-43).

Mr. DeLauney did not explain exactly how he estimated direct labor costs of \$73,601, but apparently took into consideration work on Roof Cells D and F that was not deleted, as well as changes in labor distribution resulting from the deletion (tr. 9(2)/18-26). Excluding the foreman, he estimated a total of 6,637 man hours at various hourly rates. He included 316 man hours for a foreman for asphalt pavement demolition only at \$17.00 per hour, a total of \$5,372 (tr. 9(2)/98-99). (Supp. R4, tab 388, subtab 55 at 2, 3)

SRC’s bid for the contract shows a total of 1,056 hours of labor to install the tapered insulation for Roof Cells D and F. It does not contain a separate line item for

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<sup>1</sup> We continue designation of the transcripts from the third week of trial as volumes 6(2) through 10(2) to differentiate them from the transcripts from the second week of trial, both of which were numbered 6 through 10.

installation of the crickets. (App. supp. R4, tab 152 at 16 of 17; tr. 9(2)/106-07) SRC's 15 May 2001 proposal, however, reflects only 469 man hours for installation of the tapered insulation and 67 hours for the crickets, 536 hours at a rate of \$12.00 per hour for roofers, a total of \$6,432. The proposal estimates the total cost of the installation of tapered insulation, crickets and the BUR to be \$23,028, based upon 1,919 man hours at \$12.00 per hour. Another 505 man hours at the \$12.00 hourly rate are included for other work, \$6,060. Finally, the proposal reflects \$10,338 for rental equipment relating to installation of the BUR. (Supp. R4, tab 388, subtab 55 at 2-4)

Webb Technologies (Webb) was a subcontractor to SRC, performing heating and air conditioning mechanical work (tr. 2/108). SRC asked Webb to determine the amount of the credit for its work on Roof Cells D and F, plus any costs it might incur, such as restocking fees (supp. R4, tab 296). On 14 May 2001, Webb provided SRC with a cost estimate in the total amount of \$14,832.22. The direct labor was estimated to be 320 man hours at a cost of \$7,824; the direct material was estimated to be \$2,640. (Ex. G-25) SRC did not, however, segregate the Webb costs in its proposal. Rather, according to Mr. DeLauney, the Webb subcontract costs were "put into man hours and multiplied out." (Tr. 9(2)/109, 111-12)

On 24 May 2001, the Navy notified SRC by e-mail that it would not receive funding for Roof Cells D and F (R4, tab 75). On 18 July 2001, the Navy issued unilateral Modification No. P00002, which, among other things, provided as follows:

- k. Delete all work in roof cells "D" and "F" with the exception of the flashing system on the parapet walls and the expansion joints between "F" and "H." Delete all work associated with the penthouses with the exception of any items relating to the new doors or painting.

(R4, tab 2 at 634)

ENS Alex Palmer replaced LT Hale as the AROICC (tr. 9/39). On 23 July 2001, ENS Palmer instructed SRC not to proceed with any of the flashing work on the deleted roof cells (R4, tab 95). On 7 August 2001, he discussed with Webb what Webb's costs would have been for Roof Cells D and F (tr. 9/58-59). Webb understood that ENS Palmer had accepted its proposed credit for its work, which appears to have been \$15,000 (supp. R4, tab 388, subtab 56 at 4; ex. G-26; tr. 9/47-48).

#### *The Navy's 9 August 2001 Estimates*

On 9 August 2001, ENS Palmer prepared an estimate for the credit in the amount of \$365,206 based upon the Navy's pre-bid estimate computed by Mr. David Greenfield, a registered architect employed by the Naval Public Works Center (supp. R4, tab 201, tab

388, subtab 55 at 6, 32-36; tr. 7/14, 18, 53, 9/12). This \$365,206 estimate was not used by the Navy in any of its subsequent evaluations of the credit due for the deductive change.

ENS Palmer also prepared a pre-negotiation estimate and a position paper on 9 August 2001 that totaled \$366,450 and was based upon his comparison of SRC's 15 May 2001 proposal with the Navy's pre-bid estimate. (Supp. R4, tab 388, subtabs 54, 55 at 32-34; tr. 9/16-17) His estimate of \$114,549 for materials adopted most of SRC's proposed costs, including \$43,500 for tapered insulation, \$4,990 for crickets and 117 tons of gravel at \$2,340 for the BUR. Using the Navy's pre-bid estimate and R.S. Means, however, ENS Palmer increased the cost of the BUR 4-ply and asphalt substantially, but noted in his position paper that if the 25% stocking fee was applicable, the costs should be \$9,286 and \$16,500, respectively. SRC had included dumpsters for demolition of the asphalt, a cost which he had accepted, but not for demolition of the BUR and ENS Palmer added \$5,000 for dumpsters for the BUR demolition to the cost of materials. His position paper explains how he computed this additional cost. (R4, tab 388, subtab 55 at 30, 31-33; tr. 9/23)

ENS Palmer thought that SRC's proposed labor was understated, again as based upon his comparison with the Navy's pre-bid estimate. He also questioned the proposed foreman/supervisor costs and the lack of any subcontractor costs. (Supp. R4, tab 388, subtab 55 at 30-31; tr. 9/19-26) He estimated labor costs totaling \$112,811, which he testified approximated the level of the Navy's pre-bid estimate, but without explaining how he computed the number of man hours he used (R4, tab 388, subtab 55 at 32-33; tr. 9/24-25, 53-55).

He substantially increased SRC's proposed labor costs for installation of the tapered insulation, crickets and the BUR to 4,567 man hours at \$12.00, a total of \$54,804 (tr. 9/25). None of this work would have been performed by Webb. ENS Palmer also slightly increased another six of SRC's labor item estimates. He removed the 316 man hours SRC had included for the foreman for asphalt pavement demolition and added 622 hours for the foreman at the \$17.00 hourly rate, \$10,574, allegedly using 7% of the total man hours, although 622 man hours appears to be higher than such a calculation would yield (tr. 9/22-23, 25). He otherwise accepted the balance of SRC's labor estimates as reasonable, including those for asphalt pavement and BUR demolition work (tr. 9/83, 87). (Supp. R4, tab 388, subtab 55 at 33-34)

ENS Palmer added a lump sum of \$20,000, including mark-ups, for Webb's material and labor subcontract work (supp. R4, tab 388, subtab 55 at 32-35; tr. 9/26, 64-65). He accepted SRC's \$10,338 rental equipment costs for roof installation work and added \$4,000 in equipment rental costs for the asphalt demolition work. This was \$2,000 a month for each roof cell and was based upon work that SRC had been performing on

the other roof cells and its proposals for other asphalt-related work, which had always included equipment charges. (R4, tab 388, subtab 55 at 32, 33; tr. 9/21-22, 62-66)

Finally, ENS Palmer added \$580 for material (\$560 and \$20) and \$1,416 for 118 man hours (112 and 6) at \$12.00 per hour (\$1,344 and \$72) for demolition of flashing and disposal of equipment stands, respectively. SRC had included these items but neglected to carry them forward into the material and labor cost columns (supp. R4, tab 388, subtab 55 at 33; tr. 9/24, 9(2)/236-37). Mr. DeLauney agreed this was an oversight on the part of SRC and that both should have been included (tr. 9(2)/114-16).

#### *The Navy's 5 October 2001 Post-Negotiation Estimate*

On 4-5 October 2001, ENS Palmer and Mr. DeLauney met to negotiate the credit for deletion of Roof Cells D and F. An overall price of \$304,000, but not the details of the individual line items, was negotiated. (Supp. R4, tab 388, subtab 56; tr. 9/46, 48-50, 9(2)/17) ENS Palmer thought that agreement had been reached, but he wanted it to be subject to a Defense Contract Audit Agency (DCAA) audit of SRC's mark-ups (tr. 9/16-17, 36-37). He prepared a post-negotiation estimate, dated 5 October 2001, in the same format and with the same line items as SRC's 15 May 2001 proposal and his 9 August 2001 pre-negotiation estimate. His post-negotiation estimate reflects \$97,570 for materials. He accepted SRC's 15 May 2001 proposed cost of \$11,320 for 40 tons of asphalt. He included his \$5,000 for BUR demolition dumpsters and reduced the cost of the BUR 4-ply to \$8,000. (Supp. R4, tab 388, subtab 56)

The post-negotiation estimate reflects \$89,078 for direct labor, including \$35,280 for 2,940 man hours for the installation of insulation, crickets and the BUR. This is a reduction of 1,627 man hours from his 9 August 2001 estimate of this work. ENS Palmer also accepted the six labor item estimates from SRC's 15 May 2001 proposal that he had slightly increased in his 9 August 2001 estimate and deducted both material and labor that he attributed to Webb. Nevertheless, he carried forward 622 foreman hours at \$10,574. He listed \$10,338 as the total equipment rental costs. Webb subcontract costs in the amount of \$5,000 for direct materials and \$10,000 for direct labor, marked-up to a total of \$21,810, are entered as subcontractor work. (Supp. R4, tab 388, subtab 55 at 33-34, subtab 56; tr. 9/26-27, 35-37) Mr. DeLauney disputed that there had been any agreement about the credit for Roof Cells D and F (tr. 9(2)/28).

On 27 November 2001, SRC advised ENS Palmer that it had finished the punch list work and that the remaining building materials would be turned over to the Fleet and Industrial Supply Center (FISC), the organization occupying Building W-143 (supp. R4, tab 353). An e-mail dated 6 December 2001, from Mr. Loyd Taylor, the FISC engineering technician, to Mr. Jose Hernandez, SRC's work superintendent, with a copy to ENS Palmer, stated as follows:

Joe, this will confirm my direction to you this date.

The excess roofing material in the CONEX box located in the North compound at bldg. W-143 that was left over from the roofing job is now the property of States Roofing Inc., to remove from Government property and to dispose of as you like. The government has no means to store the material [sic]. This also includes all of the new exhaust hoods currently stored on the loading dock. Please remove all and the CONEX box at your earliest convenience.

(R4, tab 120)

Mr. DeLauney understood from this e-mail and a conversation with ENS Palmer that he was to dispose of all the tapered insulation and cricket material that had been intended for use on Roof Cells D and F (tr. 9(2)/14-15, 144-45, 151-52). ENS Palmer did not testify about this alleged conversation. However, he did testify that he did not consider the e-mail to be a directive to throw-out the material and that Mr. Taylor did not have authority to direct SRC to take any contractual action (tr. 10(2)/28-29). SRC eventually disposed of the material (tr. 9(2)/15). There was no evidence that SRC was ever asked to turn the material over to the Navy.

*Modification No. P00007*

On 1 February 2002, ENS Palmer prepared yet another estimate of the credit for deletion of Roof Cells D and F, this time in the amount of \$361,813. This estimate included the same direct material, labor, rental equipment and Webb subcontract costs that are reflected in his 5 October 2001 post-negotiation estimate. The increase in the total amount was the result of changes in SRC's mark-ups following the DCAA audit. (Supp. R4, tab 388, subtab 57; tr. 9/17, 34) On 7 April 2003, the contracting officer issued Modification No. P00007 as a bilateral modification and sent it to SRC for signature. As is relevant here, it included a contract price reduction in the amount of \$361,813 for the deletion of Roof Cells D and F by Modification No. P00002. (R4, tab 133 at 1, 3 of 5) SRC did not sign the modification; it was issued unilaterally on 23 April 2003, with an effective date of 7 April 2003 (R4, tab 2 at 650-54; tr. 6(2)/136-38).

*SRC's 25 February 2002 Claim Estimate*

Meanwhile, on 18 April 2003, SRC submitted a 67-item claim to the contracting officer which was received on 21 April 2003 (R4, tabs 133, 147). By a letter dated 30 April 2003, SRC re-asserted its claims (Response to Statement of Costs (RSOC), tab 2, subtab 3 at 1260-61). Based upon an estimate dated 25 February 2002, the claim included a computation in the amount of \$239,144 as the amount of the credit due the

Navy for deletion of Roof Cells D and F. The 25 February 2002 estimate reduced the estimate for materials to \$90,650, resulting from the deletion of five dumpsters for asphalt pavement demolition. It reduced the direct labor to \$51,412, resulting from substantial reductions in the man hours estimated for the foreman, forklift operators and laborers to perform asphalt pavement demolition. These reductions were not explained. The direct material and labor estimates for installation for tapered insulation, crickets and the BUR were the same as those SRC had initially proposed on 15 May 2001. The estimate continued to reflect \$10,338 for rental equipment, but again had no segregated subcontractor costs. (R4, tab 147, subtab 11.23(12))

On 1 September 2004, the contracting officer issued a final decision on SRC's claim. With respect to the credit for deletion of Roof Cells D and F, the contracting officer noted that labor hours for the foreman, forklift operators and laborers were "markedly reduced" and that SRC had not included any subcontractor work. She concluded that she should accept SRC's initial proposal, with the rates audited by DCAA and the Webb subcontract costs negotiated by ENS Palmer. The result is a contract price reduction of \$312,290, rather than \$361,813. (R4, tab 143 at 1324-25) Her decision was reflected in Modification No. P00008, issued on 22 October 2004 (R4, tab 2). A timely appeal was filed on 29 November 2004.

#### *Hearing Estimates*

Ms. Susan Moser, who is SRC's accountant and was qualified as an expert in government cost accounting, reviewed SRC's credit proposal (tr. 8(2)/86-99). Her initial report, dated 9 March 2006, was revised on 27 June 2006, and again on 17 November 2006, during the hearing. She now calculates the cost of the credit to be \$158,769.28 (ex. A-2(H)). The direct material and labor costs were provided to her by SRC (tr. 8(2)/179-80).

Direct materials are estimated at \$54,530. This number excludes the cost of the tapered insulation and crickets and notes that these materials were "Disposed as directed" (tr. 9(2)/16). A 25% restocking charge continues to be reflected for the BUR 4-ply, resulting in an unchanged credit of \$4,243. Mr. DeLauney removed all of the costs for line item materials and labor he attributed to Webb, and then added the Webb estimate of \$14,832 as SRC materials. (Ex. A-2(H))

A total of \$46,598.56 is estimated for direct labor. Only forklift operators are included for asphalt pavement demolition; the foreman and laborers have been removed. The man hour estimates for installation of tapered insulation, crickets and BUR are the same as those consistently used by SRC. The labor and material costs for demolition of flashing material are included, but not \$20 for material and 6 hours of labor, \$72.00, for disposing of equipment stands. There are no foreman labor or equipment rental costs. (Ex. A-2(H))

The tapered insulation was not a stock item and had been a special order. Although a 25% restocking fee had been discussed initially, the material had been delivered before the Navy issued Modification No. P00002 and could not be returned to the supplier or used by SRC because of its unusual size. SRC stored the material on the roof. (Tr. 9(2)/12-15) There was no evidence that the Navy could have used it on any other project. SRC's 2 August 2001 invoice for the insulation and cricket material was paid by the Navy (ex. G-27; tr. 10(2)/34-36).

The Navy also revised its estimate of the credit for the hearing. Its 7 July 2006 estimate, as revised on 9 November 2006, reflects a total of \$341,179, and was prepared by Mr. Mark Airaghi, the ROICC supervisory engineer. (Amended RSOC (ARSOC) tabs 15(B), 15(C); tr. 9(2)/219-220) Mr. Airaghi did not undertake an independent detailed evaluation of the direct material or labor costs, relying instead upon the DCAA's verification of the costs used by ENS Palmer in his 9 October 2001 post-negotiation estimate (tr. 9(2)/231-32, 10(2)/17-18). DCAA was directed to use the negotiated material quantities and unit costs and labor hours, including 622 for the foreman, but applied \$11.15 as the incurred roofer hourly labor rate and \$14.00 for the foreman (ARSOC, tab 12 at 64-67). Mr. Airaghi's estimate shows \$97,570 for materials, \$84,208 (instead of \$89,078) for direct labor, apparently based upon the roofer and foreman rates used by DCAA, and \$10,338 in rental equipment costs. The Webb subcontract costs are listed separately in the amount of its 14 May 2001 estimate, a total of \$14,832. (ARSOC tab 12 at 64-67, tab 15(C); tr. 10(2)/16-17)

At the hearing, the parties stipulated to a labor burden rate of 20.14%, field overhead rate of 57.43%, home office overhead/general and administrative (G&A) rate of 13.57%, facilities cost of capital money (FCCOM) rate on unburdened direct labor at 0.0166% and bond premium at 0.045%. They also stipulated that the correct hourly rate for roofers was \$11.15 and that a rate of 7% of direct labor should be used to compute the number of supervisor/foreman hours charged. The Board concluded that the correct hourly rate for the foreman was \$16.62. The Board also determined that the profit rate on this contract should be seven percent and that SRC was in a loss position. *States Roofing*, 08-2 BCA ¶ 33,912 at 167,799, 167,809. Apart from sales tax at 4.5%, virtually all of these rates are different than those used in the various estimates of the cost of the deleted work.

## DISCUSSION

The Navy has the burden of proof as to the amount of the credit to which it is entitled for the deductive change deleting Roof Cells D and F. *See Nager Electric Co. v. United States*, 442 F.2d 936, 946 (Ct. Cl. 1971). The reduction to the contract price should reflect the costs SRC reasonably would have incurred to perform the deleted work and the credit to the Navy is to be measured by SRC's net savings. *Fru-Con*

*Construction Corp.*, ASBCA Nos. 55197, 55248, 07-2 BCA ¶ 33,697 at 166,818. Profit is not included in the price adjustment for the deductive change because SRC was in a loss position and profit would increase SRC's loss over what it would have been without the change. *States Roofing*, ASBCA No. 55507, 2009 LEXIS 14.

The remaining cost issues relate to direct materials, direct labor, rental equipment, and the Webb subcontract. The Navy urges us to adopt the hearing computation prepared by Mr. Airaghi, as revised on 9 November 2006, which in turn relies in large part upon ENS Palmer's 5 October 2001 post-negotiation estimate. SRC urges us to adopt its hearing computation, as revised on 17 November 2006.

#### *Webb Subcontract*

We address the Webb subcontract first in order to properly account for its direct material and labor costs. Mr. Airaghi used the 14 May 2001 estimate prepared by Webb at the request of SRC in the Navy's hearing estimate. The Webb estimate is virtually the same as the costs ENS Palmer negotiated directly with Webb in August 2001. We conclude that Webb's 14 May 2001 estimate is the most reliable evidence of its costs and that the credit to the Navy should include \$2,640 for direct materials and \$7,824 for direct labor. With mark-ups, the total Webb costs are \$14,832 and should be accounted for as subcontract work, as reflected in the Navy's final hearing computation.

#### *Direct Material*

The Navy's final hearing estimate for materials is \$97,570; SRC's final hearing estimate for materials is \$54,530. There are a number of issues associated with these estimates. The first relates to the tapered insulation and crickets, the total cost of which \$48,490 (\$43,500 + \$4,990) is not disputed. By the time the Navy issued Modification No. P00002, this material had already been delivered to the work site and thereafter was paid for by the Navy. The tapered insulation was an unusual special order size. SRC could not use it on any other jobs and a restocking fee initially had been anticipated. In the end, however, SRC could not return the insulation and crickets to the supplier, either with or without a restocking fee. It was stored by SRC until SRC disposed of it, allegedly at the direction of Mr. Taylor and ENS Palmer.

There was no evidence that the Navy either directed SRC to turn the material over to it or that the Navy could have used it on any other project. SRC's final hearing calculation gives no credit to the Navy for this material, noting it had been "Disposed as directed." The Navy asserts that it should receive a credit for the full value of the material or at least the restocking value costs because it received no benefit from the material and because SRC had no right to dispose of it without permission.

On these facts, we are persuaded that the costs of the tapered insulation and crickets should not be included in the credit to the Navy. This was not stock material; it was a special order. The Navy did not establish it had any useful value or benefit apart from Roof Cells D and F.

A second issue relates to the materials used in the installation of the new BUR. SRC's material estimates for the new BUR consistently included \$4,243 for the 4-ply, 40 tons of asphalt at \$11,320 and 117 tons of gravel at \$2,340. ENS Palmer accepted the 117 tons of gravel at \$2,340 in his 9 August 2001 pre-negotiation estimate and his position paper notes that, if the restocking fee was applicable, based upon the Navy's pre-bid estimate and R.S. Means, the 4-ply credit should be \$9,286 and the asphalt credit should \$16,500. His 5 October 2001 post-negotiation estimate, however, reduced his previous estimate of the 4-ply credit to \$8,000 and accepted SRC's 40 tons of asphalt \$11,320. These are the numbers relied upon by Mr. Airaghi. Thus, only the cost of the 4-ply material is presently disputed. The difference between SRC's and the Navy's estimates for the 4-ply material is \$3,757 (\$8,000 - \$4,243). Unfortunately, there are no invoices or receipts for this material in the record. Faced with nothing but estimates, we decide this cost in favor of the Navy because ENS Palmer based his initial estimate on the Navy's pre-bid estimate and R.S. Means and then reduced it. SRC, on the other hand, relies solely upon Mr. DeLauney's experience as an estimator.

There is also an issue relating to the Webb subcontract materials. SRC's final calculation of direct material costs includes the entire Webb estimate, \$14,832. As discussed above, this is incorrect. The estimated cost of Webb's direct materials was only \$2,640 and should be accounted for as a subcontractor cost. The Navy's final computation for direct materials does not include any Webb material costs. ENS Palmer removed them from his 5 October 2001 post-negotiation estimate, which in turn is relied upon by Mr. Airaghi.

Additionally, SRC's final hearing estimate does not include \$20 for materials relating to disposal of equipment stands, which Mr. DeLauney agreed was an oversight. With the adjustments discussed above, SRC's direct material cost estimated to be \$54,530 is reduced to \$43,475 ( $\$54,530 + \$3,757$  (BUR material) -  $\$14,832$  (Webb costs) +  $\$20$  (stands)). The Navy's estimate, \$97,570, is reduced by \$48,490 for tapered insulation and crickets, leaving \$49,080.

The difference between the Navy's and SRC's final material cost estimates is thus \$5,605 ( $\$49,080 - \$43,475$ ). The record reflects that \$5,000 of this amount is attributable to ENS Palmer's addition of dumpsters for BUR demolition, the computation for which is explained in the position paper he prepared for his 9 August 2001 pre-negotiation estimate. Absent any evidence establishing that this cost is incorrect, we include this \$5,000 in the credit due the Navy. This leaves a remainder of only \$605, which we resolve in favor of SRC absent any probative evidentiary support.

We conclude that the reasonable cost of direct materials SRC would have incurred had it performed the deleted work (other than the tapered insulation and crickets) is \$48,475 (either \$43,475 + \$5,000 or \$49,080 - \$605).

### *Labor*

The record evidence upon which we must determine the reasonable cost of direct labor leaves much to be desired. We begin our evaluation of these costs with SRC's 15 May 2001 proposal and ENS Palmer's 9 August 2001 pre-negotiation estimate. SRC's proposal estimated \$73,601 for labor, including the foreman and with Webb's labor treated as SRC costs. Mr. DeLauney provided only a general statement as to how he arrived at these estimates. ENS Palmer's estimate of \$112,811, included the foreman but no Webb labor, and generally approximated the level of the Navy's pre-bid estimate.

ENS Palmer thought that SRC's labor estimate was too low. His major disagreements related to the \$23,028 SRC had estimated for installation of the tapered insulation, crickets and the BUR and the \$5,372 SRC had computed as the cost of the foreman. This is a total of \$28,400 (\$23,028 + \$5,372). Excluding the foreman, SRC estimated 4,718 man hours for the balance of the labor (6,637 man hours proposed by SRC – 1,919 man hours for installation of insulation, crickets and BUR). ENS Palmer's 5 October 2001 post-negotiation estimate accepted the six SRC items to which he had taken minor exceptions in his 9 August 2001 pre-negotiation estimate. Thus, ENS Palmer otherwise accepted the balance of the labor SRC proposed on 15 May 2001, a total \$45,201 (\$73,601 - \$28,400).

SRC's subsequent estimates, however, substantially reduced this labor balance. In its final hearing exhibit direct labor is \$46,599, reflecting only \$18,199 for work other than installation of the tapered insulation, crickets and the BUR (\$46,599 - \$28,400).

We consider the \$45,201 accepted by ENS Palmer from SRC's 15 May 2001 proposal to represent the most reliable and probative evidence upon which to base the balance of the direct labor costs. We add another \$1,316 (118 man hours at the stipulated \$11.15 rate) for demolition of flashing and disposal of equipment stands, which Mr. DeLauney agreed should have been included in his initial estimate, to bring the total to \$46,517 (\$45,201 + \$1,316).

While there was no Webb labor associated with the installation of insulation, crickets and the BUR, there was Webb labor included as SRC labor in the balance of SRC's 15 May 2001 proposed labor costs. Because ENS Palmer accepted these proposed labor costs, he necessarily accepted costs that were actually attributable to Webb.

Accordingly, having determined that Webb's direct labor was \$7,824, we deduct this amount, leaving \$38,693 (\$46,517 - \$7,824).

A final adjustment is required to reflect the stipulated \$11.15 hourly rate for roofers. SRC's 15 May 2001 proposal included 505 man hours at an hourly roofer rate of \$12.00 (\$6,060) in this labor balance. The correct amount at \$11.15 per hour is \$5,631, a difference of \$429. Thus, we further reduce SRC's labor balance to \$38,264 (\$38,693 - \$429). We conclude that \$38,264 is the reasonable cost of SRC's direct labor for work other than the foreman and installation of the tapered insulation, crickets and the BUR.

The difference between SRC's and the Navy's initial estimates for installation of the tapered insulation, crickets and the BUR is \$31,776 (\$23,028 for 1,919 man hours vs. \$54,804 for 4,567 man hours, both at \$12.00 per hour). We consider SRC's estimate to be unreliable because SRC bid 1,056 man hours for installation of the tapered insulation, but included only 469 hours, or 536 hours if its bid included installation of crickets, for this work in its credit estimates. The Navy's initial estimate is also unreliable. Apart from the fact ENS Palmer was trying to approximate the Navy's total pre-bid cost estimate for roof cells D and F, the record does not provide any explanation as to why he made such substantial increases to SRC's proposed labor hours for this work or how he determined the number of man hours he ultimately used. In short, neither estimate is supported by probative evidence.

SRC's 25 February 2002 claim estimate and final hearing exhibit make no changes to the \$23,028 for 1,919 man hours it originally included for these three items. In contrast, ENS Palmer's 5 October 2001 post-negotiation estimate reduced the labor cost to \$35,280 for 2,940 man hours, apparently the result of discussions with Mr. DeLauney. These are the same number of man hours used by Mr. Airaghi in the Navy's final hearing estimate, although the cost is computed at the \$11.15 per hour rate.

ENS Palmer also disagreed with SRC's estimate of the foreman costs. SRC's 15 May 2001 proposal included 316 man hours at \$17.00 per hour for a foreman, \$5,372, but only for demolition of asphalt pavement. SRC substantially reduced the foreman hours in its 25 February 2002 claim estimate and ultimately eliminated them altogether in its final hearing exhibit. ENS Palmer initially included 622 man hours at \$17.00 per hour for a foreman, \$10,574. Although his estimate of the labor for the insulation, cricket and BUR work decreased by 1,627 man hours, and he accepted six additional lower SRC labor cost line item estimates, he did not change the number of foreman hours in his 5 October 2001 post-negotiation estimate. Mr. Airaghi carried this same 622 foreman hours forward in the Navy's final hearing estimate, but at the \$14.00 per hour rate used by DCAA, \$8,708.

We are thus persuaded that a jury verdict is the only way to determine the reasonable cost of direct labor for the foreman and installation of the tapered insulation,

crickets and the BUR. We are satisfied that there is ample evidence in the record for us to make a fair and reasonable approximation of SRC's labor costs using the jury verdict approach and that there is no more reliable method of computing these costs. See *Dawco Constr., Inc. v. United States*, 930 F.2d 872, 880 (Fed. Cir. 1991), *overruled on other grounds*, *Reflectone, Inc. v. Dalton*, 60 F.3d 1572, 1579 (Fed. Cir. 1995) (*en banc*); *Fru-Con Constr.*, 07-2 BCA ¶ 33,695 at 166,805.

In the nature of a jury verdict, we conclude that 2,700 man hours at the stipulated \$11.15 per hour rate for roofers, a total of \$30,105, represents the reasonable cost of direct labor for installing the tapered insulation, crickets and the BUR. With 4,718 man hours accepted by ENS Palmer and a deduction of 320 hours for Webb's labor, this is a total of 7,098 man hours (2,700 + 4,718 – 320). At the stipulated 7% of direct labor, we further conclude that 497 man hours (7,098 x 7%) at the \$16.62 hourly rate previously determined by the Board, a total of \$8,260, represents the reasonable cost of the foremen.

The reasonable cost of the direct labor SRC would have incurred is \$76,629 (\$38,264 (direct labor accepted by Navy, as adjusted) + \$30,105 (installation of tapered insulation, crickets and BUR) + \$8,260 (foreman)).

#### *Equipment*

SRC's initial proposal included \$10,338 for rental equipment relating to the installation of the new roof. ENS Palmer accepted this estimate and added another \$4,000 for demolition work. The \$4,000 was not included in his 5 October 2001 post-negotiation equipment cost estimate. Mr. Airaghi's final hearing estimate reflects only \$10,338 in equipment costs. SRC carried this same cost forward in its 25 February 2002 claim estimate, but then eliminated it completely from its final hearing exhibit. The evidence supports including \$10,338 in rental equipment costs as part of the reasonable cost of performing the deleted work.

#### *Final Credit Computation*

We incorporate the costs for which we found credits due the Navy and the stipulations previously reached into the format used by SRC and the Navy in estimating the cost of the change deleting the Roof Cell D and F work to compute the correct contract price deduction as follows:

Direct Materials	\$48,475
Sales Tax @ 4.5%	2,181
Direct Labor	76,629
Labor Burden @ 20.14%	15,433
Rental Equipment	10,338
Sales Tax @ 4.5%	<u>465</u>

Subtotal	\$153,521
Field Overhead @ 57.43%	<u>88,167</u>
Subtotal	\$241,688
Webb Subcontract Work (marked-up)	<u>14,832</u>
Total SRC and Webb Work	\$256,520
Home Office Overhead/General and Administrative @ 13.57%	34,810
FCCOM on Unburdened Labor @ 0.0166%	13
Bond Premium @ 0.045%	<u>131</u>
TOTAL	\$291,474

Unilateral Modification No. P00008 deducted \$312,290 from the contract price for the deletion of the Roof Cell D and F work. The correct amount of the credit is \$291,474. SRC is due \$20,816, plus interest from 21 April 2003. See *Technocratica*, ASBCA Nos. 47992 *et al.*, 06-2 BCA ¶ 33,316 at 165,190; *Plum Run, Inc.*, ASBCA Nos. 46091, 49203, 05-2 BCA ¶ 32,977 at 163,370, 163,374.

CONCLUSION

ASBCA No. 55508 is sustained in the amount of \$20,816, plus CDA interest from 21 April 2003.

Dated: 5 May 2009

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CAROL N. PARK-CONROY  
Administrative Judge  
Armed Services Board  
of Contract Appeals

I concur

I concur

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MARK N. STEMLER  
Administrative Judge

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EUNICE W. THOMAS  
Administrative Judge

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Acting Chairman  
Armed Services Board  
of Contract Appeals

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Vice Chairman  
Armed Services Board  
of Contract Appeals

I certify that the foregoing is a true copy of the Opinion and Decision of the Armed Services Board of Contract Appeals in ASBCA No. 55508, Appeal of States Roofing Corporation, rendered in conformance with the Board's Charter.

Dated:

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CATHERINE A. STANTON  
Recorder, Armed Services  
Board of Contract Appeals