ARMED SERVICES BOARD OF CONTRACT APPEALS

Appeal of --	)	
	)	
M. A. Mortenson Company	)	ASBCA No. 53431
	)	
Under Contract No. DACA85-94-C-0031	)	

APPEARANCES FOR THE APPELLANT: Robert H. Crick, Esq.
John H. Guin, Esq.
Heidi E. Appel, Esq.
Winston & Cashatt
Spokane, WA

William R. Joyce, Esq.
James J. Hartnett, IV, Esq.
Faegre & Benson, LLP
Minneapolis, MN

APPEARANCES FOR THE GOVERNMENT: Thomas H. Gourlay, Jr., Esq.
Engineer Chief Trial Attorney
Gregory W. Vanagel, Esq.
Engineer Trial Attorney
U.S. Army Engineer District, Alaska
Anchorage, AK

OPINION BY ADMINISTRATIVE JUDGE COLDREN

This appeal was taken from a final decision of the contracting officer denying appellant's claim seeking an equitable adjustment for being required to furnish and install manual balancing dampers located in the distribution zone which it claims were not required by the contract. The Government claims that the contract specifications required a manual damper at each point where a duct connected to a larger duct in the entire duct system, including the distribution zone. Appellant points out that the specification does not state manual dampers are to be installed at "each" point or "all" points but "at points" where the duct size changes which means, according to appellant, where both the duct size changes, and the dampers are also depicted on the contract drawings. The appeal was submitted on the written record without a hearing under Rule 11. Only entitlement is before us.

FINDINGS OF FACT

1. On 16 September 1994, the Government awarded a contract to appellant to construct the Composite Medical Facility, Phase II, at Elmendorf Air Force Base,

Alaska (R4, tab 1; Affidavit of Thomas A. Szymczak, ¶ 4). The contract contains the standard Changes and Disputes clauses.

2. The heating, ventilation, and air conditioning (HVAC) system for this project was divided into three zones called an Integrated Building System (IBS). The distribution zone was located from either the roof or the floor slab of the room above down to a walk-on deck. This distribution zone was unfinished space used to house the distribution lines for the HVAC. The connection zone was the space between the walk-on deck and the finished ceiling for the occupied space below. The main lines of the distribution system in the distribution zone were connected to diffusers and other HVAC devices for the occupied space in the connection zone. (Szymczak, ¶¶ 5-7) The dispute concerns the requirement for manual balancing dampers in the distribution zone.

3. Paragraph 2.7.2.5 of Section 15895 of the contract specifications provides in pertinent part as follows:

> Volume dampers shall be provided at points on supply, return, and exhaust systems where submains, branch mains, or branches and run-outs are taken from larger ducts.

(R4, tab 15) The parties dispute the meaning of the words "at points" in determining the locations where the dampers were to be furnished and installed. The parties appear to use the terms "volume dampers" and "manual balancing dampers" interchangeably.

4. Contract drawing M0.01 lists a symbol which designates a manual balancing damper as well as symbols for diffusers (R4, tab 17; Affidavit No. 1 of Leo Monaghan, ¶ 7). A manual balancing damper is an in-line device to vary the air volume passing through the ductwork to balance the system (Szymczak, ¶ 9; Affidavit of Gary A. Mihlfried, ¶ 4).

5. Contract drawings M1.201 through M1.232 as well as M1.301 through M1.333 are labeled as the first and second level area floor plans for the HVAC. These drawings do not show any symbols for the manual balancing dampers but do depict many symbols for diffusers. Note 1 of each of these drawings states:

> Unless otherwise indicated, diffuser runout ducts shall equal neck size of connected device. Provide manual volume damper at each branch/runout take-off.

Note 6 on each of these drawings further states:

> All devices and equipment indicated on this plan shall be fabricated and/or installed in accordance with the applicable

> typical details on the M6 series drawings of these contract documents.

One of appellant's supporting affidavits indicates that these drawings are of the connection zone. (R4, tabs 18, 19; Monaghan No. 1, ¶ 8)

6. Detail 6 of contract drawing M6.02 and detail 2 of contract drawing M6.10 depict how the diffusers are connected by flexible ducts to the supply, return, or exhaust round or rectangular ducts (R4, tabs 20, 21). Each detail depicts the symbol for the manual damper near the connection to the supply, return, or exhaust duct. The manual damper symbol is also labeled as "manual balancing damper." Detail 6 is labeled "Typical Flexible Duct Take-Off/Low Pressure," while detail 2 is entitled "Ceiling Diffuser Installation Detail" and is also marked "typical."

7. Contract drawing M0.01 lists symbols which designate terminal units with and without heating coils (R4, tab 17).

8. Contract drawings M1.250 through M1.281 and M1.350 through M1.382 are labeled as the first and second level IBS area floor plans for the HVAC. These drawings do not show any symbols for the manual balancing dampers but do depict many of the symbols for terminal units with and without heating coils. Note 3 of each of these drawings states:

> Unless otherwise indicated, branch ducts to terminal units shall be equal to terminal unit inlet size. Provide a manual balancing damper at each terminal unit run-out duct. Refer to terminal unit sheet schedule on this drawing for inlet sizes.

Notes 5 and 6 on each of these drawings provides:

> 5. All devices and equipment indicated on this plan shall be fabricated and/or installed in accordance with the applicable typical details on the M6 series drawings of these documents.
>
> 6. Refer to Detail 1/M5.39 [in some cases, 2/M5.39] for typical arrangement of branch services within the IBS Distribution Zone.

One of appellant's affidavits indicates that these drawings are for the distribution zone. (R4, tabs 22, 23; Monaghan No. 1, ¶ 10; Affidavit No. 2 of Leo Monaghan, ¶¶ 6-7)

9. Detail 10 of contract drawing M6.02 depicts a smaller conical duct connecting to a larger conical duct as well as a smaller rectangular duct connecting to a larger rectangular duct (R4, tab 20). Both of these connections are depicted as being in the connection zone

as described in finding 2. The rectangular duct connection refers to detail 5 and the conical connection refers to detail 7 of drawing M6.02. These details show a manual balancing damper on the smaller cross-sectional duct and are described in detail *infra*.

10. Details 1 and 2 of contract drawing M5.39 depict smaller conical ducts connecting to larger conical ducts in the distribution zone as described in finding 2. Manual balancing dampers are depicted on the smaller ducts at each of these connection points in the distribution zone. They are located on the drawings in areas marked as "Typical HVAC Return/Exhaust Branch Channel." Note 1 of this drawing states:

> All devices and equipment on this plan shall be fabricated and/or installed in accordance with the applicable typical details on the M6 series drawings of these contract drawings.

(R4, tab 20; *see* Monaghan No. 1, ¶ 9)

11. Detail 5 of contract drawing M6.02 depicts a smaller rectangular duct connecting to a larger rectangular duct (R4, tab 20). Detail 5 is labeled as a "Typical Rectangular Duct Branch." It shows a manual balancing damper on the smaller cross-section duct near the duct connection point. It is not marked as being limited to any particular pressure duct or to any particular IBS zone.

12. Detail 7 of contract drawing M6.02 depicts a smaller conical duct connecting to a larger conical duct (R4, tab 20). Detail 7 is labeled as a "Typical Duct Tap - Conical Tee." It shows a manual balancing damper on the smaller cross-section duct near the duct connection point. It is not marked as being limited to any particular pressure duct or to any particular IBS zone.

13. Appellant's ductwork subcontractor SSM Industries, Inc. (SSM) analyzed the contract drawings to determine where the typical details requiring dampers described above as well as symbols for the manual balancing dampers were shown. It then completed that analysis by counting the number of points this information was shown on the contract drawings to determine how many dampers had to be furnished and installed. (Szymczak, ¶¶ 10, 12; Monaghan No. 1, ¶¶ 6, 13)

14. SSM prepared its bid to the mechanical subcontractor, Botting/Poole & Kent (BPK), by including the costs to supply and install only the dampers it determined were shown on the contract drawings as described in finding 13 (Monaghan No. 1, ¶ 10). BPK relied on SSM's bid in computing its bid to appellant (Affidavit of Thomas P. Lynott, ¶¶ 3-5). Appellant in turn relied on BPK's bid in preparing its bid to the Government (Affidavit of Craig Southorn, ¶¶ 2-5).

15. The manual balancing dampers which appellant and its subcontractors claim are not required by the contract are located in the distribution zone. The disputed dampers were installed in medium pressure, large ducts where smaller ducts connect to larger ducts. Some of these dampers were upstream of another manual damper and terminal box for the supply side. They were located in both the supply portion and the return or exhaust portion of the system. (Szymczak, ¶ 18; Monaghan No. 2, ¶¶ 7-9, 11)

16. Initially, appellant through SSM purchased and installed the manual dampers as it interpreted the contract drawings and specifications during bid take-off (Szymczak, ¶¶12, 14; Monaghan No. 1, ¶ 13).

17. By a memorandum dated 16 October 1996, appellant's contract quality control representative conducted an inspection of the project and requested that BPK "verify that balancing damper[s] are install [ed] at all duct branches, flexible take-offs, and duct taps as specified in section 15895.2.7.2.5" (R4, tab 11). Appellant replied by RFI No. 2441 dated 12 November 1996 as follows:

> SSM has installed balancing dampers at all locations indicated on the contract drawings, and at each Terminal unit run-out duct (branch duct to each diffuser downstream of the box) in the 21BS Mock-up area as specified in the drawing notes (Note 3/M1.366 typical). This conforms to the TAB requirements specified under TS 15990.
>
> Please confirm that this is the correct interpretation of the contract requirements.

(R4, tab 10)

18. The contracting officer's representative responded on 26 November 1996 to appellant's RFI No. 2441 that he did not agree with appellant's interpretation (R4, tab 10). In particular, he stated:

> Provide and install manual balancing dampers at all locations specified in TS 15895.2.7.2.5, as indicated on details 5, 6 and 7/M6.02, on all terminal unit run-out ducts (Typical IBS Plan General Note 3), at each branch duct or run-out take-off (Typical Floor Plan General Note 1) and at all other locations shown in the contract documents.

19. By a letter dated 22 January 1997, appellant requested that the Resident Engineer issue a change order because the additional balancing dampers to be installed upstream of the terminal units resulted in additional installation, materials and labor costs

(R4, tab 7). It also requested in a letter dated 14 March 1997, that the Government provide the balancing criteria for the additional balancing dampers (R4, tab 5). The contracting officer replied in a letter dated 19 March 1997 that it was appellant and its subcontractor's responsibility to determine this and, if the additional dampers were not needed in balancing the system, appellant should lock them fully open (R4, tab 4).

20. Appellant installed the disputed 1,283 manual balancing dampers. It had to cut and remove the already installed ductwork, remove a length of ductwork, install the damper, and then install an insulation patch (Szymczak, ¶¶ 19-21).

21. By a claim letter dated 12 December 2000, certified on 18 December 2000, appellant requested an equitable adjustment in the amount of $297,608 for the work described in finding 20 (R4, tab 3). The contracting officer issued a final decision dated 6 June 2001 denying this claim (R4, tab 1). A timely appeal was filed with this Board on 21 June 2001.

22. Appellant's subcontractor BPK's joint venture partner's Chief Engineer, who is a licensed, professional engineer with over 43 years HVAC experience, opined that no industry standard required that a manual balancing damper be furnished and installed at each point where the duct size changed. He also opined that a contractor should only reasonably provide such dampers if the contract plans specifically call for them. (Affidavit of J. Richard Wagner, ¶¶ 1, 6) Similarly, a Government engineer Jeffrey Hardin testified in a deposition on 15 May 2000 in ASBCA No. 52770, also involving appellant and the Corps of Engineers under the same contract, that he would not use manual balancing dampers upstream of VAV boxes because he was of the opinion that they performed no function, although some people think otherwise (R4, tab 3, ex. O-6).[*]

DISCUSSION

Appellant's principal argument is that Paragraph 2.7.2.5 of Section 15895 of the contract specifications only requires the installation of the manual balancing dampers at the points where these dampers are depicted on the contract drawings. Thus, the threshold issue is whether the disputed locations where the contracting officer required the furnishing and installing of the manual balancing dampers are shown on the contract drawings. The disputed dampers were installed in the medium pressure, large ducts located in the

[*] Appellant submitted this deposition and its affidavits with its briefs. The Government objected. The Board afforded the Government an opportunity to file reply evidence and argument. The Government waived its right to do so.

distribution zone (finding 15). Some are upstream of another manual damper and the terminal box on the supply side ducts (*id.*).

Notes 5 and 6 of the distribution drawings refer to the details of the M6 series of drawings and to Detail 1, or, in some cases, Detail 2, on Drawing M5.39 for the details of fabrication and installation of devices and equipment in the distribution zone (finding 8). Details 5 and 7 of contract drawing M6.02, which is an M6 series drawing, depict a manual balancing damper on a smaller duct where it connects to a larger duct (findings 11, 12). Each detail is labeled as being typical and is not marked that it does not apply to any type of pressure duct or IBS zone (*id.*). In addition, details 1 and 2 depict manual balancing dampers on smaller ducts connected to larger ducts in the distribution zone (finding 10).

We hold that the contract drawings require manual balancing dampers at each point where a smaller duct connects to a larger duct for all types of pressure ducts and in all zones including the distribution zone.

The appeal is denied.

Dated: 31 October 2002

JOHN I. COLDREN, III
Administrative Judge
Armed Services Board
of Contract Appeals

I concur

I concur

MARK N. STEMPLER
Administrative Judge
Acting Chairman
Armed Services Board
of Contract Appeals

EUNICE W. THOMAS
Administrative Judge
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. 53431, Appeal of M. A. Mortenson Company, rendered in conformance with the Board's Charter.

Dated:

EDWARD S. ADAMKEWICZ
Recorder, Armed Services
Board of Contract Appeals