ARMED SERVICES BOARD OF CONTRACT APPEALS

Appeals of)		
Parsons Main, Inc. Under Contract No. DACA41-94-C-0103)))	ASBCA Nos. 51355, 51717	
APPEARANCES FOR THE APPELLANT:		John B. Tieder, Jr., Esq. Kathleen O. Barnes, Esq. Watt, Tieder, Hoffar & Fitzgerald, L.L.P. McLean, VA	

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OPINION BY ADMINISTRATIVE JUDGE JAMES ON RESPONDENT'S MOTION FOR RECONSIDERATION

Respondent timely moved for reconsideration of our 10 June 2002 decision in ASBCA Nos. 51355, 51717, 02-2 BCA ¶ 31,886, contending that the decision contains material errors of fact and law. Appellant replied to the motion. Familiarity with that decision is assumed. "Exhibit 1" to respondent's motion summarizes test boring information from several exhibits and from witness testimony, and contains anonymous opinions on whether the test borings met pier acceptance criteria. Appellant objected to such exhibit as belated evidence (app. reply br. at 12-15). We strike "Exhibit 1" to respondent's motion. *See United Technologies Corp.*, ASBCA No. 25501, 86-3 BCA ¶ 19,171 at 96,921-22 (attachments to brief struck for lack of foundation, authentication and due process to opponent to cross-examine a witness to test their validity).

I.

Respondent first contends that our decision erred in finding that appellant's assumptions about competent bedrock were neither inappropriate nor overly optimistic (Gov't mot. at 1-10). Respondent's expert witness, Dr. Kulhawy, opined that appellant's estimated bottom elevations were based on the inappropriate assumption "that good quality

rock would be obtained at shallow depth beneath the rock surface" (finding 62(3)) and its "rock mass characterization was overly optimistic" (finding 62(4)).

Respondent asserts that the "sound bedrock" standard, "limestone with no discontinuities spaced less than 12" or having apertures exceeding one foot with soil or rock debris" stated in finding 18, and the "discontinuities spaced at greater that [sic] 12" and with apertures less than 0.2" (or less than 1' if filled with soil or rock debris)" stated in finding 63, is not found in the appeal record, and "there is no evidence that this standard had any bearing or influence on Parsons' estimates of pier lengths" (mot. at 2).

Respondent is correct. Dr. Kulhawy mentioned an equation taken from a Federal Highway Administration (FHWA) manual in his opinion. Appellant confirms that Philip "consulted the major references of literature, including the Federal Highway manual, but then abandoned the values yielded from the manuals because they were too high, and did not account for the poor quality of the rock at the site" (app. reply br. at 12, n.3, citing tr. 944-47, 1033-34). The parties agree that the FHWA equation or standard is irrelevant to PMI's assumptions about competent bedrock below auger refusal.

Our findings 18 and 63 misquoted that irrelevant FHWA standard by stating apertures exceeding "one foot" or 1' instead of "one inch" or 1". Therefore, we correct our decision by (i) deleting the third sentence in the first full paragraph after the block quote in finding 18, "For these 11 . . . one foot with soil or rock debris"; (ii) substituting "than" for "that" in line 8 of the first sentence, substituting 1" for 1' in line 10 of the first sentence, and deleting the third, fourth and fifth sentences, in finding 63; and (iii) in the fifth paragraph of point I.B in the decision, 02-2 BCA at 157,539, revising the second full sentence to state: "PMI's test boring data included five test borings that did not extend, and 11 borings that extended, 10 or more feet below auger refusal" and deleting the introductory clause from the sixth sentence, "Considering that two-thirds of PMI's test borings that yielded the EBEs extended at least ten feet into competent bedrock "

Respondent contends that if one eliminates the irrelevant standard, and uses specification § 02383, ¶ 3.1 criteria for "sound limestone" stated in finding 27, the "only relevant standard" (Gov't mot. at 3), only PMI's test boring Nos. B-10, B-24A, and B-32A, in or nearby the building footprint, showed "sound limestone," 3 of 16 data points were inadequate to estimate the pier lengths, and such "guesswork . . . should be negligence per se" (Gov't mot. at 8-9).

There are two fatal flaws in respondent's argument. First, Dr. Kulhawy did not opine that appellant's assumptions about competent bedrock elevations were "per se" negligent, as respondent now argues. Dr. Kulhawy opined that any one of the 10 shortcomings he asserted may not have been a problem, but they did create a problem in the aggregate (finding 62). Appellant's expert witness, Dr. Melvin Esrig, opined that "the estimated lengths of the piers were based on a reasonable methodology and on reasonable estimates of the likely bearing level The estimates of pier length did not reflect negligent

engineering on the part of Parsons." (AR4, tab 711 at 25; *see also* finding 65(d)) The Board assessed the probative weight of those experts' opinions to be equal. 02-2 BCA at 157,539.

Second, respondent cites no expert evidence in the record to support its ultimate conclusions that only PMI's test boring Nos. B-10, B-24A, and B-32A showed "sound limestone" in or nearby the building footprint, and 3 of 16 data points were inadequate to estimate the pier lengths. We have carefully re-examined the record, including the testimony of Dr. Esrig and Messrs. Bodtman and Kottemann cited in the motion. The testimony provides evidence concerning 7 borings (five which did not extend 10 feet below auger refusal and two others which stopped short of the required probe hole depth); it does not, however, support respondent's ultimate conclusions.

Significantly, respondent does not cite Dr. Kulhawy's testimony to support such conclusions, and the Board's review of Dr. Kulhawy's testimony and exhibits does not support those conclusions. Indeed, the presiding judge sustained appellant's objections to exhibits G-234 and G-245 and granted its motions to strike Dr. Kulhawy's testimony regarding whether six of Philip's test borings met the § 03282, ¶ 3.1, probe hole criteria for pier acceptance, for lack of any analysis to support such conclusions in his expert report and pre-filed testimony provided to appellant in accordance with the Board's pre-hearing order (tr. 575-77, 647-54; *see also* 19 April 2001 order on motion in limine re Dr. Kulhawy). Respondent did not take exception to these evidentiary rulings in its post-hearing brief and request that the panel overrule them. Accordingly, those rulings are final. *Cf. W. M. Schlosser Co.*, ASBCA No. 44778, 96-2 BCA ¶ 28,587 at 142,732 n.2 (ruling admitting evidence was final); tr. 8. The belated and stricken "Exhibit 1" to respondent's motion contains anonymous conclusions about whether the test borings met pier acceptance criteria.

Therefore, we reaffirm our conclusion that respondent did not sustain its burden of proving appellant's bedrock assumptions were negligent.

II.

Movant's second assertion is that the Board erred in concluding that "any form of a deep shaft foundation was a viable design choice for the NIMA site," disregarding Dr. Kulhawy's view that a viable deep shaft foundation design should have employed side friction in combination with end-bearing (Gov't mot. at 10-11).

Appellant's pier design provided for using end-bearing acceptance criteria based upon inspecting the quality of bedrock at the pier base, and for using side friction acceptance criteria if the bedrock did not conform to the end-bearing criteria (finding 27). Dr. Esrig cited O'Neill and Reese, <u>Drilled Shafts: Construction Procedures and Design Methods</u>, 1999 Edition, for the statement that "the decision whether or not to combine base and side friction capacities is one left to engineering judgment" (AR4, tab 711 at 14, 17).

Thus, appellant's inclusion of side friction as ancillary criteria for approving pier depths, rather than in combination with end-bearing criteria, was a reasonable exercise of engineering design judgment.

We found that the parties were well aware of the difficulties and uncertainties in identifying the top of "competent" or "acceptable" bedrock in the karst subsurface at the NIMA site (findings 5-6, 12-15, 18, 24). Appellant's proposed end-bearing, deep shaft design included the technical safeguard of side friction acceptance criteria if sound limestone was not found below the estimated pier depths, and the contractual safeguard of unit price adjustments to the construction contractor for unanticipated, additional linear footage of piers and probe test holes in ¶ 1.2 of specification § 02383 (findings 18, 27). In that total context, appellant's end-bearing pier design was not negligent.

III.

Respondent's third alleged error is that the Board did not address respondent's breach claim based on FAR 52.236-22 DESIGN WITHIN FUNDING LIMITATIONS (Gov't mot. at 13-14). That clause required appellant to design the NIMA project "so as to permit the award of a [construction] contract . . . at a price that does not exceed the estimated construction contract price" (finding 3). Appellant fulfilled that duty (finding 32). Respondent misconstrues the scope of duties under that clause. That clause imposed no duty on appellant to assure that the construction contractor could complete performance within such estimated construction contract price.

IV.

Respondent's fourth assignment of error is that our decision considered the Government's review and approval of appellant's design as validating such design (Gov't mot. at 14-16). Finding 26 stated that the Government determined that PMI's "building design was satisfactory." Neither that finding, nor any of our conclusions, stated or suggested that the Government thereby assumed responsibility for the NIMA facility design, or absolved PMI from its duties under the A-E contract.

CONCLUSION

The remaining arguments respondent raises for reconsideration (Gov't mot. at 14-19) repeat arguments previously considered and rejected. We reaffirm our original holding, grant respondent's motion to the extent of the clarifications set forth above, and deny the balance thereof.

Dated: 24 September 2002

	DAVID W. JAMES, JR.
	Administrative Judge
	Armed Services Board
	of Contract Appeals
I concur	I concur
MARK N. STEMPLER	EUNICE W. THOMAS
Administrative Judge	Administrative Judge
•	Vice Chairman
Acting Chairman	
Armed Services Board	Armed Services Board
of Contract Appeals	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	•
**	* *
Main, Inc., rendered in conformance with the Boar	d's Charler.
Dated:	
	EDWARD S. ADAMKEWICZ
	Recorder, Armed Services
	Board of Contract Appeals