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2018 VT 130

No. 2017-436

W.M. Schultz Construction, Inc.

Supreme Court

v.

On Appeal from
Transportation Board

Vermont Agency of Transportation

May Term, 2018

Vanessa Kittell, Chair

William Alexander Fead of Fead Construction Law, PLC, South Burlington, and John W. Dreste of Ernstrom & Dreste, LLP, Rochester, New York, for Plaintiff-Appellee.

Thomas J. Donovan, Attorney General, Eleanor L.P. Spottswood and Toni Hamburg Clithero, Assistant Attorneys General, Montpelier, for Defendant-Appellant.

PRESENT: Reiber, C.J., Skoglund, Robinson, Eaton and Carroll, JJ.

¶ 1. **SKOGLUND, J.** The Vermont Agency of Transportation (VTrans) appeals from the Transportation Board’s order granting judgment to W.M. Schultz Construction, Inc. in this contract dispute. The Board concluded that Schultz encountered “differing site conditions” in carrying out its bridge-construction project and that it was entitled to an equitable adjustment for costs it incurred as a result. VTrans appeals, arguing that the Board misread the contract materials and otherwise erred in granting judgment to Schultz. We affirm.

I. Facts

¶ 2. The record indicates the following. Schultz entered into a contract with VTrans in December 2013 to replace four bridges destroyed by Tropical Storm Irene. Three bridges were

completed without incident. This dispute concerns the fourth bridge, referred to as “Bridge #19.” The Bridge #19 project involved the construction of a single-span steel-girder bridge over the White River in Rochester, Vermont. The west abutment was to be placed on a deep pile foundation and the east abutment (Abutment #2) was to be placed on ledge.¹ The work was to begin in April 2014 and be completed in a single construction season.

¶ 3. After engaging in exploratory drilling, Schultz discovered what it considered “differing site conditions,” i.e., subsurface physical conditions that were materially different than those described in the contract plans and specifications. Schultz’s claim concerned the elevation of the subsurface bedrock or ledge associated with Abutment #2. According to Schultz, the assumed rock elevation of 802.5 feet for the bottom of the bridge footing as shown on VTrans’ plans was in fact drastically irregular and much lower in some areas than shown. Schultz argued that the uneven elevation required it to change the specific means and methods required for the installation of a cofferdam from what had been originally estimated in its bid pricing—a sandbag style cofferdam—to a steel-sheet pile cofferdam.²

¶ 4. Schultz filed a claim under the contract’s differing-site-conditions provision, which states:

104.08 DIFFERING SITE CONDITIONS.

(a) During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those specified in the Contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the Contract, are encountered at the site, the party discovering such conditions shall promptly notify the other party in

¹ “Bedrock (Ledge)” is defined in the bid documents as “Rock in its native location of indefinite thickness.”

² A “cofferdam” is “a watertight enclosure from which water is pumped to expose the bottom of a body of water and permit construction.” Webster’s Ninth New Collegiate Dictionary 256 (1985).

writing of the specific differing conditions before they are disturbed and before the affected work is performed.

(b) Upon written notification, the Engineer will investigate to determine if the conditions materially differ and will cause an increase or decrease in the cost or time required for the performance of any work under the Contract. The Contractor will be notified of the Engineer's determination, whether or not an adjustment of the Contract is warranted. If an adjustment is warranted, the Contract will be modified in writing accordingly. Any adjustment made will exclude loss of anticipated profits.

(c) No Contract adjustment that results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice.

(d) No Contract adjustment will be allowed under this clause for any effects caused on unchanged work.

As VTrans notes, this project was funded in part with federal aid and the inclusion of this standardized differing-site-conditions provision was required under 23 C.F.R. § 635.109, with the exception of subdivision (d), which is optional.³

¶ 5. “The purpose of the Differing Site Conditions clause is to allow contractors to submit more accurate bids by eliminating the need for contractors to inflate their bids to account for contingencies that may not occur.” H.B. Mac, Inc. v. United States, 153 F.3d 1338, 1343 (Fed. Cir. 1998). This clause:

makes it clear that bidders are to compute their bids, not upon the basis of their own preaward surveys or investigations, but upon the basis of what is indicated and shown in the specifications on the drawings. The clause should induce the bidder not to consider such contingencies as the latent or subsurface conditions, for which the Government has assumed responsibility.

Foster Constr. C.A. v. United States, 435 F.2d 873, 887 (Ct. Cl. 1970) (quotations omitted) (discussing history and purpose of differing-site-conditions clause).

³ The type of claim at issue here is referred to as a Type I differing-site-conditions claim. See Renda Marine, Inc. v. United States, 509 F.3d 1372, 1376 (Fed. Cir. 2007).

II. Legal Standard Employed Below

¶ 6. Both VTrans and the Board evaluated Schultz’s differing-site-conditions claim under the so-called Stuyvesant test. To be entitled to an equitable adjustment under this test, a contractor must prove by a preponderance of the evidence that:

(1) “the conditions indicated in the contract differ materially from those it encounters during performance”;

(2) “[t]he conditions actually encountered” were “reasonably unforeseeable based on all the information available to the contractor at the time of bidding”;

(3) “it reasonably relied upon its interpretation of the contract and contract-related documents”; and

(4) “it was damaged as a result of the material variation between the expected and encountered conditions.”

Stuyvesant Dredging Co. v. United States, 834 F.2d 1576, 1581 (Fed. Cir. 1987) (citations and quotations omitted).⁴

¶ 7. The first Stuyvesant element is a “threshold” question—the contract must contain “some identification of the conditions to be encountered at the site.” Renda Marine, 509 F.3d at 1376. While there need not be “express representations as to the nature of conditions, . . . at least insofar as subsurface or latent conditions are concerned, there must be reasonably plain or positive indications in the bid information or contract documents that such subsurface conditions would be otherwise than actually found in contract performance.” Pac. Alaska Contractors, Inc. v. United States, 436 F.2d 461, 469 (Ct. Cl. 1971); see also Stuyvesant, 834 F.2d at 1581 (outlining same standard).

⁴ The Board found this test appropriate and the parties agreed that it applied. The Board noted that it would reach the same result if it analyzed Schultz’s claim directly under the contract language.

III. Agency Decisions

¶ 8. Applying this test, VTrans' Construction Engineer denied Schultz's claim. He found no material difference between the conditions described in the contract and those encountered by Schultz at Abutment #2, and he concluded that the actual conditions were reasonably foreseeable.

¶ 9. The Chief Engineer (CE) reached a similar conclusion. He determined that the contract documents did not reasonably convey an expectation that the level of ledge for the bottom of the footing at Abutment #2 was approximately 802 feet. He found that only two plan sheets referred to the elevation of ledge at Abutment #2. The first, Plan Sheet 190, indicated that the existing ledge was "approximately" 802 feet. The CE found that the second, Plan Sheet 220, assumed a similar ledge elevation; the CE concluded, however, that this sheet was not intended to address the design details for Abutment #2. Plan Sheet 179, which included a drawing entitled "Cofferdam and Earthwork Section, Not to Scale," did not refer to the elevation of the ledge, and the CE found that it conveyed the designer's expectation that the ledge around Abutment #2 sloped downward, both before and after the section upon which the footing was to be placed. The CE also cited soil borings data that had been provided to bidders, concluding that this information should have informed Schultz that the ledge at Abutment #2 had a substantial slope toward the west. Additionally, he cited the significantly different bid prices for the cofferdam as evidence that Schultz failed to adequately estimate the cost of constructing Abutment #2. For these and other reasons, the CE rejected Schultz's claim.

IV. Board Decision

¶ 10. Schultz appealed to the Transportation Board, a body with "specialized expertise concerning industry norms, the doctrines that have arisen around them, and the highly fact-specific nature of the issues and disputes typically arising from construction contracts." Luck Bros., Inc. v. Agency of Transp., 2014 VT 59, ¶ 25, 196 Vt. 584, 99 A.3d 997; see also 19 V.S.A. § 3 (stating

that, to extent possible, Board should be composed of “members whose interests and expertise lie in various areas of the transportation field”). The Board conducts an “essentially de novo review” of the agency’s decision. Luck Bros., 2014 VT 59, ¶ 27 (“Review before the Transportation Board, although it does not necessarily involve a full-blown hearing and does not treat the Agency’s decision as if it did not exist, is essentially de novo review.”). “Because the Agency evaluation of contract claims is an internal, informal dispute-resolution process that does not require any due process protections, the Board owes no deference to an Agency decision to reject a contract claim, beyond the persuasive value of the decision.” Id. ¶ 24.

¶ 11. Following a June 2017 evidentiary hearing, the Board granted judgment to Schultz. With respect to the first element of the Stuyvesant test, the Board found that the bid documents repeatedly stated that the approximate elevation of existing ledge was 802 feet and they did not state that subsurface conditions were unknown, could vary, or were sloped. It found that Plan Sheets 220, 225, 226, and 227 depicted elevations drawn to scale using the defined symbol for exposed ledge, and each represented, sometimes in multiple places, existing ledge elevation at approximately 802.5 feet at Abutment #2.

¶ 12. Importantly, the Board continued, the bid documents described the prior bridge, which had been built in 1974, and stated that the footing for the then-existing Abutment #2 was poured directly on ledge. That description was presented as “Existing Bridge Data,” a known fact. The new Abutment #2 was to be located largely in the same location as the prior Abutment #2. Nothing indicated that the ledge on which the existing abutment footer had been poured was at an elevation that differed from the bid documents’ several other ledge descriptions and data. Additionally, the two soil borings closest to, and directly behind, the preexisting 1974 abutment showed ledge rock elevations of 802.6 feet and 801.2 feet.

¶ 13. The Board rejected VTrans’ arguments that the bid documents “did not indicate any actual depth of ledge” or that they clearly marked the height of ledge as “approximate” or

“elevation varies.” The Board found these generic qualifications unconvincing. It reasoned that while such qualifications might require a contractor to exercise reasonable caution or prudence, they did not override the basic purpose of the bid documents, which was to indicate conditions known (and unknown) about the work site.

¶ 14. The Board found no project drawing specifying that the existing ledge was anticipated to dramatically slope, dramatically vary, or dramatically drop-off from the approximate 802.5-foot elevation indicated by the drawings. Additionally, it found that no evidence had been presented to prospective bidders that the preexisting 1974 Abutment #2 was not founded on existing ledge as depicted in Plan Sheet 189. It determined that no drawing indicated anything other than that bidders should anticipate the existing ledge at Abutment #2 to be at an elevation of approximately 801 to 802.5 feet.

¶ 15. Additionally, the Board explained that a subfooting was generally required when ledge was at a lower elevation. Here, no subfooting was depicted in the drawings for Bridge #19, although a subfooting was depicted for another bridge (Bridge #13) that was part of the same contract. During the pre-bid meeting, bidding contractors, including Schultz, were advised to expect that the elevation of the rock ledge would vary at Bridge #13 but they were not given a similar warning for Bridge #19. The documents for Bridge #19 did not include a pay item for concrete for a sub-footing, moreover, while the contract documents for Bridge #13 did.

¶ 16. The Board also found that ordinary low water within the White River was represented on Plan Sheet 175 as being a depth of 1.5 feet, while ordinary high water was represented as being a depth of 11 feet. The ordinary low water measurement of 1.5 feet was one of the factors that convinced Schultz to choose a sandbag cofferdam for water control. Schultz retained TAW Associates to design a water control plan in accordance with its plan. The sandbag cofferdam was expected to work so long as the rock elevation was no lower than about three feet

below 802 feet. VTrans accepted Schultz's initial water control plan and did not comment or raise concerns that the design relied on a rock elevation of approximately 802 feet.

¶ 17. The actual conditions were undisputed. The ledge sloped steeply just a few feet from the boreholes and it varied in elevation by up to ten feet from 802.5 feet to 793 feet in elevation. Contrary to the bid documents, moreover, the footing for Abutment #2 for the prior bridge had not been poured on exposed ledge but was instead suspended over soil. The Board further found that the actual conditions required Schultz to use different means and methods than those it had planned to use in response to the bid documents. A different, more extensive and expensive sheet piling cofferdam was required in lieu of the sandbag cofferdam. The Board found that pinning the new abutment to the actual location of the ledge required significantly more work and a subfooting.

¶ 18. Turning to the remaining Stuyvesant elements, the Board concluded that the actual conditions were not reasonably foreseeable and that Schultz reasonably interpreted the bid documents to allow reliance on the indicated conditions. In reaching its conclusion, the Board cited the testimony of Mr. Waite, a professional engineer and the principal of TAW Associates. Mr. Waite designed the cofferdam for Schultz. In doing so, he undertook an independent engineering review, which involved reviewing the contract documents. Mr. Waite stated that determining the presence of ledge around Abutment #2 was "a governing factor" in designing the cofferdam.

¶ 19. Mr. Waite explained in detail the process by which he concluded, based on the bid documents, that the elevation of ledge at Abutment #2 was approximately 802 feet. He began by looking at Plan Sheet 190 to obtain a profile of the bridge. He then looked at the two closest borings to Abutment #2 because they were "right dead against the back of the existing footing" and "coincide[d] pretty much with the new footing as well." These two borings varied somewhat, which indicated to him that the ledge might slope along the length of the footing. Mr. Waite

therefore looked at Plan Sheet 220, which depicted the cross-sections of the channel, to look for any variation in the ledge in the transverse direction of the bridge. Mr. Waite subsequently reviewed the section of the abutment, wondering about the sloping of the ledge from the back of the footing to the front. These documents, Plan Sheets 225-227, again showed a relatively slight slope from the back toward the front. Considering the borings with the cross-sections gave Mr. Waite the impression that it was relatively level at about an 802-foot elevation along the length of the abutment.

¶ 20. Mr. Waite then looked at the “existing bridge data,” which stated that Abutment #2 was constructed in 1974 as spread footing on ledge. If the spread footing was constructed on ledge, he reasoned, then ledge was exposed at one time and VTrans had knowledge that the ledge was relatively level under this footing. Otherwise, Mr. Waite stated, it would have been shown differently. Based on this information, Mr. Waite concluded that the ledge was at an elevation of approximately 802 feet, and he used this elevation as the basis for the design of the cofferdam. Mr. Waite testified that he believed his conclusion was reasonable. He provided additional testimony about the changes required to the cofferdam and other issues. VTrans did not object to any of his testimony.

¶ 21. The Board found that Mr. Waite provided an expert opinion that a reasonable engineer would exercise the same judgment as Schultz did here and that it was reasonable to conclude that the approximate bedrock elevation would be 802 feet. The Board found this evidence bolstered by the absence of drawings and pay items for Abutment #2’s subfooting. It reiterated that subfootings generally were represented in drawings and pay items when it was anticipated that they were needed. While there was a plan note in this case stating that a subfooting would be needed if the ledge was more than one foot below the footing’s design bottom, there were no drawings or pay items for Bridge #19 subfootings. Instead, the drawings indicated that ledge was at 802.5 feet, a height where a subfooter would not be needed. In short, the Board found

the possible need for a subfooting reflected in the plan note was an apparently generic statement that was, at best, ambiguous. It determined that the possible need for a subfooter could not reasonably be read to show that the ledge elevation was inconsistent with the repeated indications.

¶ 22. The Board was also persuaded by the extensive experience of Schultz's principal, Mr. Schultz, in estimating and bidding on projects. It found Schultz's reliance on a well-developed system for preparing bids was further evidence that it acted reasonably. The Board thus concluded that the actual conditions were reasonably unforeseeable and that Schultz reasonably interpreted and relied on the bid documents. It found Schultz's actions and judgment to be those of a "reasonable and prudent" contractor.

¶ 23. Finally, the Board found that Schultz was "damaged as a result of the material variation between the expected and the encountered conditions." Stuyvesant, 834 F.2d at 1581. The differing conditions required additional work for which Schultz was not paid and required a longer timeframe to complete the project, which resulted in the assessment of liquidated damages. The Board found that VTrans was not entitled to any liquidated damages for the delay in completing the project because the additional time was due to differing conditions and the time was reasonable and should have been allowed.

¶ 24. Schultz claimed further damages of nearly \$600,000 representing the costs incurred because of the differing conditions. It presented documentary evidence and testimony to support this claim. VTrans did not present any testimony or other supplemental evidence taking issue with Schultz's claimed costs. The Board acknowledged that VTrans' position was the same as that detailed in the agency decisions. The Board reviewed those decisions and the record on which they were based. It found that there did not appear to be any evidence in the record developed by VTrans assessing or disputing the specific costs Schultz sought, beyond the claim that the conditions were foreseeable. The Board found that the differing site conditions required Schultz

to incur additional costs of \$589,782.09 and that Schultz was entitled to damages in this amount. This appeal followed.

V. Arguments on Appeal

A. Preliminary Issues

¶ 25. We first address Schultz’s assertion that VTrans lacks standing to pursue this appeal. Schultz asserts that allowing VTrans to appeal would “frustrate the purpose of the rule requiring exhaustion of administrative remedies.” Schultz also assumes that this is a “contested case” under the Vermont Administrative Procedure Act and asserts that VTrans has no right to appeal because it does not qualify as a “person” under 3 V.S.A. § 815(a). See *id.* (“A person who has exhausted all administrative remedies available within the agency and who is aggrieved by a final decision in any contested case may appeal that decision to the Supreme Court, unless some other court is expressly provided by law.”).

¶ 26. We reject these arguments. The pertinent statute provides, with an exception not relevant here, that “final orders of the Board may be reviewed on the record by the Supreme Court.” 19 V.S.A. § 5(c). “It has long been recognized [that] statutes giving and regulating the right of appeal are remedial in nature and should receive a liberal construction in furtherance of the right of appeal.” *In re Preseault*, 130 Vt. 343, 346, 292 A.2d 832, 834 (1972). The plain language of § 5(c) does not limit who may appeal, and liberally construing this provision, we conclude that it allows any party properly before the Board, including VTrans, to appeal to this Court.

¶ 27. We also reject VTrans’ assertion that the Board “improperly ignored the administrative record before it” contrary to the process required by *Luck Bros.*, 2014 VT 59, ¶ 27. The record does not support this contention. It is evident that the Board reviewed the contract materials and the agency decisions. The Board owed no deference to the agency’s decisions, however, and it was not obligated to “discuss, explain, or refute” the Chief Engineer’s analysis as

VTrans posits. See *id.* ¶ 24 (“[T]he Board owes no deference to an Agency decision to reject a contract claim, beyond the persuasive value of the decision.”). The Board obviously was not persuaded by the agency’s decision and it was entitled to draw its own conclusions from the evidence. Its review was consistent with the process described in Luck Bros.

¶ 28. Finally, we need not decide if, as VTrans argues, the Board erred by stating that “[t]he hearing and evidence admitted at the hearing is governed by the Vermont Administrative Procedure Act, 3 V.S.A. §§ 809-812.” VTrans maintains that the provisions cited by the Board describe the procedures for conducting a contested case, and a contested case is one in which a hearing is required by law. VTrans asserts that there is nothing in Vermont law that requires the Board here to hold a hearing to review an agency decision. We find it unnecessary to decide this issue because VTrans identifies no particular harm that it suffered as a result of the Board’s approach and we find none.

B. Standard of Review

¶ 29. We thus turn to the merits of the Board’s decision, beginning with our standard of review. Both parties appear to agree—to some degree—that it is appropriate to use the same standard of review applied by the U.S. Court of Federal Claims and the U.S. Court of Appeals for the Federal Circuit in evaluating similar claims.

¶ 30. The federal courts consider the first element of the Stuyvesant test—whether the contract contained some identification of the conditions to be encountered at the site—as presenting “a question of contract interpretation reviewed de novo on appeal.” Int’l Tech. Corp. v. Winter, 523 F.3d 1341, 1348-49 (Fed. Cir. 2008). “A proper technique of contract interpretation on this problem is for the court to place itself into the shoes of a reasonable and prudent contractor and decide how such a contractor would act in appellant’s situation.” P.J. Maffei Bldg. Wrecking Corp. v. United States, 732 F.2d 913, 917 (Fed. Cir. 1984) (quotation omitted). The remaining

elements of the Stuyvesant test present questions of fact “reviewed under a deferential standard.” Int’l Tech. Corp., 523 F.3d at 1349.

¶ 31. Schultz argues that additional deference to the Board’s legal conclusions may be warranted here given the Board’s “specialized expertise concerning industry norms, the doctrines that have arisen around them, and the highly fact-specific nature of the issues and disputes typically arising from construction contracts.” Luck Bros., 2014 VT 59, ¶ 25. VTrans, by contrast, argues that this Court should ensure that all contracts are interpreted consistently as a matter of law and urges us to follow the federal government’s lead in this area.

¶ 32. We have held that “[a] decision of an administrative board is entitled to great weight with respect to matters within its particular area of expertise.” In re Tariff Filing of Green Mountain Power Corp., 138 Vt. 213, 215, 414 A.2d 1159, 1160 (1980). The federal courts are similarly mindful that the agency board “has considerable experience and expertise in interpreting Government contracts, and its interpretation is given careful consideration and great respect.” HPI/GSA 3C, LLC v. Perry, 364 F.3d 1327, 1333 (Fed. Cir. 2004) (quotation omitted); see also Lockheed Martin Corp. v. Walker, 149 F.3d 1377, 1379 (Fed. Cir. 1998) (“[T]he Board’s determinations on issues of contract interpretation are reviewed de novo, although our review is mindful of the Board’s specialist expertise.”); R.B. Wright Constr. Co. v. United States, 919 F.2d 1569, 1571 (Fed. Cir. 1990) (“Since contract interpretation is a question of law, the Board’s interpretation is not binding upon us. But because of the Board’s expertise on questions of government contracts, we give some weight to the Board’s interpretation of particular contractual language.”). We find it appropriate to apply a similar standard here. Thus, our review of the first Stuyvesant element is de novo but we are mindful of and give some weight to the Board’s “specialized expertise.” Luck Bros., 2014 VT 59, ¶ 25.

C. Stuyvesant Test

1. First Element

¶ 33. With this standard of review in mind, we first consider if there were “reasonably plain or positive indications in the bid information or contract documents that such subsurface conditions would be otherwise than actually found in contract performance.” Pac. Alaska Contractors, Inc., 436 F.2d at 469; see also Stuyvesant, 834 F.2d at 1581 (outlining same standard). VTrans essentially reiterates the CE’s analysis in arguing that this standard is not satisfied. It argues that the Board should have given greater weight to certain plan sheets and information and less weight to other materials.

¶ 34. More specifically, VTrans argues that the contract conveyed the variability of the ledge elevation through the contract’s project notes, which provided for the possibility of a subfooter; the inclusion of a way in which to calculate payment for excavating up to fifteen feet below the design if necessary; and the use of the words “approximate” and “elevation varies” in several plan sheets. VTrans also cites the soil borings, arguing that the data from all six borings provided the best indication of substructure material. Additionally, VTrans cites Plan Sheet 212, entitled “Abutment No. 2 Footing Masonry Plan,” arguing that this was the controlling document because it used calculated dimensions rather than scaled dimensions and this document indicated, at the bottom of the Abutment #2 footing, “el. varies.” VTrans asserts that the depictions of ledge in Plan Sheets 220, 225, 226, and 227, using the symbol for ledge, were insufficient “to establish indications on which the contractor could justifiably rely.” A.S. McGaughan Co. v. United States, 24 Cl. Ct. 659, 665 (1991). VTrans also challenges the Board’s reliance on Plan Sheets 189 and 238, which set forth the existing bridge data concerning the 1974 footer.⁵

⁵ Relying on cases that involve “patent ambiguities,” VTrans also asserts that if an ambiguity existed in the contract, Schultz had a duty to inquire “regardless of the reasonableness of the contractor’s interpretation.” Fortec Constructors v. United States, 760 F.2d 1288, 1291 (Fed. Cir. 1985). The present case does not involve a “patent ambiguity,” and assuming that this

¶ 35. As indicated above, the first element of the Stuyvesant test “is subject to de novo review, based on how a reasonable contractor would interpret the contract documents as a whole.” Int’l Tech. Corp., 523 F.3d at 1349. A “contractor does not need to show that its ‘interpretation is the only reasonable one, but it does bear the burden of showing that its construction is at least a reasonable reading.’ ” United Constructors, LLC v. United States, 95 Fed. Cl. 26, 37 (2010) (alteration omitted) (quoting P.J. Maffei Bldg. Wrecking Corp., 732 F.2d at 917).

¶ 36. We conclude that it was reasonable for Schultz to construe the contract as indicating that the elevation of the bedrock at Abutment #2 was approximately 802.5 feet. While we do not defer to the Board’s decision on this element, we agree with its analysis, particularly its focus on the 1974 bridge, an issue that the Chief Engineer did not address. Like the Board, we find it significant that the prior bridge was depicted in largely the same location as the proposed bridge and that it showed the footing at Abutment #2 directly on ledge. The information provided about the 1974 bridge shapes this case, and the soil borings and the various caveats and design contingency language in the bid documents must be construed in light of these representations. We reject the notion, moreover, that there was one “controlling” document. In evaluating Schultz’s claim, we consider the contract materials as a whole. Int’l Tech. Corp., 523 F.3d at 1350.

¶ 37. VTrans fails to dissuade us of the importance of the information provided about the 1974 bridge. It asserts that the “Existing Bridge Data” notation, which stated that the prior abutment was “spread footing on ledge,” did not necessarily mean that it rested entirely and directly on bedrock without any subfooter. But this is not the question. The question here is how

argument was preserved, VTrans’ reliance on this doctrine is misplaced. Cf. id. (concluding that contract was “patently ambiguous” because it provided no direction as to which of two rebar schemes was required for project; patent ambiguity gave rise to “duty of inquiry, regardless of the reasonableness of the contractor’s interpretation,” and court considered “trade standards and practices of the relevant business community” to determine correct meaning of contract). The question in this case is whether Schultz established its differing-site-conditions claim, including whether it reasonably read the contract as making a representation as to the elevation of ledge at Abutment #2.

a reasonable contractor would construe the information provided. It was reasonable to read the notation to mean what it said. This is particularly true given the drawings that portrayed the existing bridge abutment footing as a level plateau with slopes on either side. Additionally, as the Board observed, nothing in the contract materials indicated that the ledge on which the existing abutment footer had been poured was at an elevation that differed from the bid documents' several other ledge descriptions and data. No subfooting was depicted in the drawings for Bridge #19, moreover, and there was no pay item for concrete for a subfooting.

¶ 38. Our conclusion is not undermined by the statement in the “Preliminary Information Sheet,” under the heading “Existing Structure Information,” which reads, “Type of Material Under Substructure: See Borings.” It is true, as VTrans posits, that bidders have the right “to rely upon drill hole data in the contract, recognized to be the most reliable and the most specific indicator of subsurface conditions.” Foster Constr. C.A., 435 F.2d at 888 (quotation omitted). Citing Renda Marine, 509 F.3d at 1378, VTrans argues, that as a matter of course “all borings in a contract must be reviewed for the most complete understanding of subsurface conditions, not just the borings in the immediate area of concern.” This is not the holding of Renda Marine. Instead, the court there considered the contract materials as a whole, including boring logs, and upheld a finding that certain subsurface conditions (stiff clays) were foreseeable in the project area and should reasonably have been anticipated. Id. The marine dredging contractor in Renda Marine had relied upon two of five borings in the area to be dredged, but the two it relied upon “reflected subsurface conditions at depths considerably below where [the contractor] would be required to do most of its dredging.” Id. at 1377. “Under these circumstances,” the Court of Federal Claims found, “those logs gave an incomplete account of the materials to be dredged . . . and [the contractor] should have considered [the remaining] boring logs.” Id. The U.S. Court of Appeals for the Federal Circuit upheld this finding, noting that the remaining borings were within the relevant area and

that an expert witness testified that it was unreasonable to rely only upon the two borings to the exclusion of other borings in adjacent areas that provided additional information. Id. at 1378.

¶ 39. In the instant case, Schultz reasonably construed the borings data in light of other information—presented as a known fact—that the prior abutment was “spread footing on ledge.” This interpretation was consistent with various plan sheets depicting the ledge at 802.5 feet. The argument that Schultz should have discerned the deep slope from the borings data fails to account for the fact that the existing bridge abutment footing was portrayed as a level plateau with slopes on either side. Understood from the perspective of all of the other representations in the contract materials, the borings data was consistent with Schultz’s reasonable expectations. We note that, unlike the agency in Renda Marine, VTrans did not provide any expert testimony to support its assertion that it was unreasonable under the circumstances of this case for Schultz to rely on the two borings closest to the existing and proposed Abutment #2.

¶ 40. We are equally unpersuaded by VTrans’ assertion that a reasonable contractor could not rely on the various plan documents that depicted ledge, using the symbol for ledge, at approximately 802.5 feet. According to VTrans, the documents had to depict bedrock in some form and there is no conventional symbol for “possible ledge” or “ledge with uncertain contour.” VTrans maintains that the depictions of ledge should not control over plan annotations and notes. As with the existing bridge data, we find it reasonable for Schultz to have taken these plan sheets at their face value and read them to represent the presence of ledge as depicted. It had no need to “clarify” this straightforward depiction through reference to the plan notes.

¶ 41. VTrans argues that this case is remarkably similar to Geary v. City of New Haven, 55 A. 584 (Conn. 1903). It largely relies on this case to support its argument that use of the word “approximately” in labeling elevation conveys uncertainty about actual depth and that contingencies included in a contract can convey uncertainty. See id. at 587.

¶ 42. We are unpersuaded. First, the Geary court was not interpreting a differing-site-conditions clause or applying the Stuyvesant test; the contractor there assumed the risk of “any unforeseen obstructions or difficulties which may be encountered in the prosecution of the work.” Id. at 586. Viewing the contract materials here as a whole—including multiple plan sheets depicting ledge at 802.5 feet and the 1974 bridge information—a reasonable contractor would not view the use of the word “approximate” to convey that the ledge elevation could vary wildly from what was represented. We are similarly unpersuaded that the various design contingencies in the instant case conveyed that the ledge was not as it was represented to be in multiple plan sheets. Cf. id. These caveats—including a statement that elevation could vary and the inclusion of a method of payment for excavation up to fifteen feet below the design—must be considered through the lens of “known information” provided to prospective bidders and in light of the contract materials as a whole.

¶ 43. We thus conclude that the contract here contained “reasonably plain or positive indications” that the “subsurface conditions would be otherwise than actually found in contract performance.” Pac. Alaska Contractors, Inc., 436 F.2d at 469.

2. Remaining Stuyvesant Elements

¶ 44. VTrans next challenges the Board’s findings that “[t]he conditions actually encountered” were “reasonably unforeseeable based on all the information available to the contractor at the time of bidding” and that Schultz “reasonably relied upon its interpretation of the contract and contract-related documents.” Stuyvesant, 834 F.2d at 1581. VTrans repeats its assertion that the Board failed to properly review the full record, an argument we rejected above. VTrans also argues that the Board erroneously credited Mr. Waite as an expert after stating repeatedly during the hearing that he was not an expert. It asserts that the Board’s determination that the conditions were reasonably unforeseeable relies largely on Mr. Waite’s “expert opinion that a reasonable engineer would exercise the same judgment as Schultz did here, and that it was

reasonable to conclude that the approximate bedrock elevation would be at approximately 802 feet.” Without Mr. Waite as an expert, VTrans asserts, the Board’s analysis becomes untenable. VTrans also argues that the Board placed undue significance on Schultz’s experience in the industry and its “well-developed system for preparing bids.” It disagrees with the Board’s assessment of the weight of the evidence in other ways as well, asserting that it should have found that Schultz failed to consider all of the information available at the time of bidding, including the borings data, certain plan sheets, and the price differential in the cofferdam bids.⁶

¶ 45. As noted above, we defer to the Board’s findings regarding these two elements. Int’l Tech. Corp., 523 F.3d at 1349. As the factfinder, the Board “determines the credibility of witnesses and weighs the persuasive effect of evidence.” In re JLD Props. of St. Albans, LLC, 2011 VT 87, ¶ 17, 190 Vt. 259, 30 A.3d 641 (quotation omitted). “[W]e will not disturb its findings unless, taking them in the light most favorable to the prevailing party, they are clearly erroneous,” meaning that there is no “credible evidence” to support them. Id. (quotations omitted). VTrans fails to demonstrate clear error here.

¶ 46. At the outset, we note that the Board did not rely on Mr. Waite’s testimony alone in reaching its conclusion. It found his testimony compelling but it also cited the absence of drawings and pay items for Abutment #2’s subfooting, the extensive experience of Schultz’s principal in estimating and bidding on projects, and Schultz’s reliance on a well-developed system

⁶ VTrans also asserts that in analyzing “reasonable foreseeability,” the Board failed to account for the location of the cofferdam, rather than just the abutment. This argument is raised for the first time in VTrans’ reply brief and we do not address it. See Gallipo v. City of Rutland, 2005 VT 83, ¶ 52, 178 Vt. 244, 882 A.2d 1177 (stating that issues not raised in original brief may not be raised for first time in reply brief). We note, however, that the question is not whether Schultz should have anticipated the likelihood “of at least slightly deeper bedrock under the cofferdam.” It is whether the “[t]he conditions actually encountered” were “reasonably unforeseeable based on all the information available to the contractor at the time of bidding” and whether Schultz “reasonably relied upon its interpretation of the contract and contract-related documents.” Stuyvesant, 834 F.2d at 1581. Schultz reasonably interpreted the contract to indicate that the ledge would be at a particular elevation and it designed its cofferdam accordingly, allowing for a foot or two margin of error.

for preparing bids. VTrans' argument that the Board placed undue significance on Schultz's experience in the industry and its "well-developed system for preparing bids" simply wars with the Board's assessment of the weight of the evidence. See also Renda Marine, Inc. v. United States, 66 Fed. Cl. 639, 653 (2005) ("A reasonable contractor is expected to draw upon previous experience in the industry and/or region."). We do not reweigh the evidence on appeal. In re JLD Props. of St. Albans, LLC, 2011 VT 87, ¶ 17. VTrans raises several other arguments in this vein that we reject for the same reason.

¶ 47. We find no reversible error in the Board's reference to Mr. Waite as an "expert." We construe this label as denoting the undisputed fact that Mr. Waite is a professional engineer who engaged in an independent engineering review of the contract materials in this particular case in the process of designing a cofferdam for Schultz. Essentially, he was asked to opine about the reasonableness of his own assumptions regarding what information was conveyed in the contract materials. VTrans did not object to any particular testimony that Mr. Waite offered. It cross-examined him on the basis for his opinion. It was VTrans, moreover, that elicited testimony from Mr. Waite as to how a "reasonable person" would construe the contract documents.

¶ 48. The record with respect to Mr. Waite's testimony indicates the following. At the outset of his testimony, Mr. Waite described his education, qualifications, background, and work experience. The Board Chairman asked the parties if they would stipulate to Mr. Waite's expertise. Counsel for VTrans indicated that she was happy to stipulate that Mr. Waite was an expert, but she sought "a little more specificity as to what he's going to express an opinion on." Counsel for Schultz replied that Mr. Waite was "primarily a fact witness, but he also happens to be an engineer, and in the course of his services directly for Schultz he was their consulting engineer" and "necessarily imparted . . . conclusions." The Board Chairman stated "That's fine. . . . So he's not an expert. That's fine."

¶ 49. As recounted earlier, Mr. Waite testified in detail as to how he designed the cofferdam for Schultz, including his independent review, as a professional engineer, of the contract documents. He testified that determining “the location of the ledge at the base of the abutment [was] critical to the location of the cofferdam.” He described why he concluded that the contract documents reflected the elevation of ledge at Abutment #2 as approximately 802 feet. He explained his cofferdam design, noting that it would have worked had the ledge been one or two feet deeper but the ledge here was significantly lower than the assumed elevation. He described the process of designing the new cofferdam. Mr. Waite explained why he had more confidence regarding elevation in this case than in other cases.

¶ 50. Counsel for VTrans then cross-examined Mr. Waite, questioning him about his reliance on certain plan sheets and information. In response to a question by VTrans, Mr. Waite expressed his belief “that a reasonable person looking at those cross sections, looking at the two borings that are directly adjacent to that footing, and looking at the note that said that this bridge is sitting directly over the existing bridge, which was placed on exposed rock, exposed ledge, a reasonable conclusion is that because they’re shown this way, that the DOT, or the designer, . . . believed that that ledge under that existing abutment is relatively level, sloping slightly toward the river.”

¶ 51. Under the circumstances, the Board did not err in relying on this testimony and recognizing that Mr. Waite, a professional engineer, believed that his interpretation of the contract materials was reasonable. The question before the Board was whether “[t]he conditions actually encountered” were “reasonably unforeseeable based on all the information available to the contractor at the time of bidding” and whether Schultz “reasonably relied upon its interpretation of the contract and contract-related documents.” Stuyvesant, 834 F.2d at 1581. While labeling Mr. Waite an “expert” may have been technically inaccurate, it was fair to rely on his testimony with respect to these elements here.

3. Damages

¶ 52. Finally, VTrans argues that Schultz is not entitled to an equitable adjustment because the “work” of the contract was unchanged. It relies on subsection (d) of the “Different Site Conditions” provision in the contract, which states that “No Contract adjustment will be allowed under this clause for any effects caused on unchanged work.” VTrans maintains that this clause incorporates a body of law that distinguishes between design and performance specifications and, according to VTrans, the term “work” in the clause cited above refers to both the design and performance specifications of the contract. VTrans cites Stuyvesant, 834 F.2d at 1582, in support of the first proposition and Daewoo Engineering & Construction Co. v. United States, 73 Fed. Cl. 547, 567 (Fed. Cl. 2006), in support of the second. Based on these propositions, VTrans argues that there is an additional element that must be satisfied before an equitable adjustment can be awarded: “any differing site condition must change either the design or performance specifications of the contract.” VTrans asserts that this additional element was not satisfied here.⁷

¶ 53. VTrans’ assertions are not supported by the case law it cites. Courts have focused on the design/performance distinction in evaluating “defective specification” claims, not differing-site-condition claims. See, e.g., Stuyvesant, 834 F.2d at 1578 (considering claim that “specifications were defective” in addition to differing-site-conditions claim). With respect to the former type of claim, courts have held that “[d]etailed design specifications contain an implied warranty that if they are followed, an acceptable result will be produced.” Id. at 1582 (citing United States v. Spearin, 248 U.S. 132 (1918)); see also PCL Constr. Servs., Inc. v. United States, 47 Fed. Cl. 745, 794 (2000) (similarly explaining that “warranty of government specifications,” or

⁷ To the extent that VTrans raises a new and different argument in its reply brief, we do not address it. See Gallipo, 2005 VT 83, ¶ 52. We have rejected the specific argument made in appellant’s opening brief that subdivision (d) incorporates a particular body of law and adds another element that must be proved to recover damages.

“Spearin doctrine,” “provides that if the government furnishes specifications for the production or construction of an end product and proper application of those specifications does not result in a satisfactory end product, the contractor will be compensated for its efforts to produce the end product, notwithstanding the unsatisfactory results”). As one court explained, “[t]he warranty applies only to ‘design specifications’ because only by utilizing specifications in that category does the government deny the contractor’s discretion and require that work be done in a certain way,” and “[w]hen the government imposes such a requirement and the contractor complies, the government is bound to accept what its requirements produce.” PCL Constr. Servs., Inc., 47 Fed. Cl. at 795 (further explaining that “[t]he Spearin doctrine has been discussed and clarified over the years, often with the words ‘design’ and ‘performance’ specifications used to differentiate between contracts for which the specifications warranty does and does not apply.” (quotation omitted)).

¶ 54. In Stuyvesant, the court rejected the contractor’s defective-specifications claim because the technical provision at issue “was not a detailed design type specification for which the government might be liable under the defective specification theory,” but was instead “a performance type specification for which the government does not warrant accuracy or adequacy.” 834 F.2d at 1582 (quotation and brackets omitted). Citing the Spearin doctrine and Stuyvesant, the Daewoo court similarly rejected a defective-specification claim because it involved performance specifications rather than design specifications. 73 Fed. Cl. at 567-68.

¶ 55. These cases do not support the proposition that the word “work” in subdivision (d) of the differing-site-conditions provision “refers to both the design and performance specifications of the contract” or the proposition that this therefore means that the differing-site-conditions clause “incorporates an additional element that must be satisfied before an equitable adjustment can be

awarded: any differing site condition must change either the design or performance specifications of the contract.”⁸ We thus reject VTrans’ argument.

¶ 56. In this case, the Board found that Schultz was “damaged as a result of the material variation between the expected and the encountered conditions.” Stuyvesant, 834 F.2d at 1581. This is the damages standard set forth in Stuyvesant and it is consistent with the language in the contract, specifically subdivision (b) of the differing-site-conditions provision. The Board found that Schultz reasonably relied on the ledge elevations in the bid documents in designing and pricing its cofferdam. Because the ledge was much deeper than anticipated, Schultz was required to construct a different, more time-consuming and more expensive, cofferdam. In the words of subdivision (b), the differing site conditions “cause[d] an increase . . . in the cost or time required for the performance of any work under the Contract.” See also Renda Marine, 66 Fed. Cl. at 656 (explaining that to recover damages for Type I differing-site-condition claim, contractor must “prove[] by a preponderance of the evidence that its increased performance costs were solely attributable to the materially different subsurface conditions” (quotation omitted)); Spirit Leveling Contractors v. United States, 19 Cl. Ct. 84, 94 (1989) (stating that to recover damages for Type I

⁸ In fact, though not raised or discussed below, the language in subdivision (d) appears to be a resurrection of “the old ‘Rice Doctrine’—which precluded the recovery of compensation for the effect of a delay resulting from a change,” that is, consequential “delay damages.” R. Nash & J. Cibinic, The ‘Rice Doctrine’: Has It Been Resurrected?, 10 No. 12 Nash & Cibinic Report ¶ 64 (Dec. 1996) (discussing language found in subsection (d) above); see also United States v. Rice, 317 U.S. 61, 67 (1942) (concluding that contractor was not entitled to equitable adjustment for consequential damages resulting from delay caused by government’s unexpected discovery of unsuitable soil condition because “[i]t was never contemplated that delays incident to changes would subject the Government to damage beyond that involved in the changes themselves”); T. Kelleher Jr. et al., The Resurrection of Rice? The Evolution (and De-Evolution) of the Ability of Contractors to Recover Delay Damages on Federal Government Construction Contracts, 39 Pub. Cont. L.J. 305 (Winter 2010). We are not concerned with “delay damages” here. Cf. Hardeman, Inc. v. United States, 186 Ct. Cl. 743 (1969) (distinguishing between attempt to recover “delay damages” as described in Rice and request for equitable adjustment for increase in cost of performance brought about by changed condition, explaining that “equitable adjustment allowable as a result of a changed condition is the difference between what it cost (the contractor) to do the work and what it would have cost it if the unforeseen conditions had not been encountered” (quotation omitted)).

differing-site-conditions claim, “contractor must demonstrate that the excess costs are attributed entirely to the materially different subsurface conditions met at the site”).

¶ 57. The Board specifically found that the differing conditions required additional work for which Schultz was not paid and required a longer timeframe to complete the project, which resulted in the assessment of liquidated damages. VTrans did not present evidence or testimony, or cross-examine Schultz’s witnesses, regarding the costs Schultz claimed as damages. It stipulated to the admission of exhibits that contained the invoices on which Schultz based its damages. VTrans does not challenge any particular cost item on appeal. We conclude that the Board’s damages award is supported by its findings and by the record and we find no error.

Affirmed.

FOR THE COURT:

Associate Justice