



UNITED STATES
CIVILIAN BOARD OF CONTRACT APPEALS

GRANTED IN PART: January 31, 2008

CBCA 848

NEW SOUTH ASSOCIATES,

Appellant,

v.

DEPARTMENT OF AGRICULTURE,

Respondent.

J. W. Joseph, Vice President - Administration of New South Associates, Stone Mountain, GA, appearing for Appellant.

Mark R. Simpson, Office of the General Counsel, Department of Agriculture, Atlanta, GA, counsel for Respondent.

Before Board Judges **PARKER** and **DeGRAFF**.

DeGRAFF, Board Judge.

Appellant contracted to perform professional services for respondent and seeks an equitable adjustment to the contract price because it performed more work than it expected to perform when it entered into the contract. Appellant elected to proceed according to our accelerated procedure and the parties submitted the case for a decision based upon the written record. Rules 19, 53 (72 Fed. Reg. 36,803, 36,808 (July 5, 2007)). We grant the appeal in part.

Findings of Fact

In mid-2006, the Forest Service, an agency within the United States Department of Agriculture, solicited proposals for a fixed price contract for professional archaeological services. Specifically, the Forest Service wanted a contractor to perform an archaeological survey and preliminary site evaluation in the Francis Marion National Forest in South Carolina. The contractor would be required to make a background historical review, conduct a systematic and intensive archaeological survey within various timber stands, record its findings, make a preliminary National Register of Historic Places eligibility evaluation of sites within the inventory area and mark eligible sites, analyze artifacts, and prepare a written report of these activities. Appeal File, Exhibit 11 at 1, 2, 4.¹

The archaeological work was to be performed in support of timber harvests within the forest. Areas with timber stands older than approximately twenty-five years would be surveyed and evaluated before they were harvested, while areas containing stands of younger timber would be surveyed and evaluated after they were harvested. Exhibit 11 at 4. The solicitation contained three bid items and each bid item included both young and old timber. Exhibit 11 at 3.

The solicitation said the project area would be divided into high, medium, and low site potential areas according to the likelihood the areas would contain sites which would yield archaeological discoveries. Soil drainage, the location of water sources, the presence of historic sites, and abandoned roads influenced the distinction among areas of high, medium, and low site potential. The contractor would be required to travel the entire project area on foot and make initial shovel tests. The solicitation specified the distances between tests made in high potential areas and between tests made in medium site potential areas, while the distances between tests made in low potential areas were to be determined by the contractor. High site potential areas required 4.5 shovel tests per acre. Medium site potential areas required 2.25 shovel tests per acre. Exhibits L, 11 at 4, 6-7, 14.

The Forest Service attached to the solicitation compartment and stand maps which showed the areas which contained stands of timber to be harvested, stated the number of acres contained in each stand, and shaded the areas within each stand according to whether they were high, medium, or low site potential areas. Exhibits 9 at 33-75, 11 at 32.

The solicitation provided that if a new archaeological site was located as the result of shovel tests, the contractor would be required to establish a grid and perform additional

¹ All exhibits are found in the appeal file, unless otherwise noted.

shovel tests in order to determine the boundary of the site. The contractor would also be required to attempt to locate previously recorded sites and might have to perform additional work in connection with such sites, depending upon whether the extent, characteristics, integrity, and content of the site had been adequately defined during a prior survey. The contractor would have to create maps of all sites and the maps would have to include details specified by the contract. The contractor would also have to record the sites in a particular manner. Exhibit 11 at 7-8. The contractor would be responsible for making recommendations as to whether a site was eligible for the National Register of Historic Places and for preparing all of the documentation needed to support such recommendations. Exhibit 11 at 10-11. In addition, the contractor would be required to deal with recovered artifacts in a specific manner and its field work had to be sufficient to address questions regarding the cultural periods represented and the function of archaeological sites, as well as questions about the periods represented, the ownership, the function, and the architecture of historic sites. Exhibit 11 at 10, 18.

The solicitation said the contractor would be required to complete the tasks contained in Section II of the solicitation. Exhibit 11 at 5. Section II.A said the contractor would meet with the contracting officer and the contracting officer's representative before initiating field work. The purpose of the meeting was, in part, to review Forest Service Heritage Resource information and to examine pertinent natural resource data, reports, and maps. Exhibit 11 at 6.

Section II.C.2, Requirements - Performance Work Statement Tasks and Critical Subtasks - Inventory - Identification Efforts, read, in part, as follows:

Survey methods and strategy are based on generalized models of site location for the Francis Marion National Forest. Classification of the project area into high, medium, and low potential for site location shall be determined by examining [United States Geological Survey (USGS)] topographic quadrangle maps, county soil maps and other information obtain[ed] during the background and literature review. The Francis Marion National Forest compartment and stand maps provided by the Forest Service shall guide the Contractor in determining site potential for the purpose of work planning and cost estimation. However, final determination of the site potential for any survey area shall be suggested by the Contractor in the field based on the actual ground conditions within the stand at the time of the survey. The Forest Service shall be the final authority on site potential within any given area and the Contractor shall comply with the Forest Service's assignment of site potential.

Exhibit 11 at 6.

Section II.C.3, Requirements - Performance Work Statement Tasks and Critical Subtasks - Inventory - Site Potential Model, read, in part, as follows:

The contractor shall review the model of site location for prehistoric and historic sites. All project areas will be divided into high, medium, and low site potential areas prior to fieldwork in a manner that can be justified and relates to the results of previous research in the South Carolina coastal plain. The proposed division of site potential areas will be reviewed and approved by the [contracting officer's representative (COR)] prior to beginning of fieldwork. The model will be explained in the report methods section. High and low potential areas may require differing survey strategies.

Exhibit 11 at 6.

On September 27, 2006, the Forest Service awarded the contract which was the subject of the solicitation to New South Associates, Inc. for the price of \$450,656.59. Exhibit 9 at 1, 3. The contract included all of the above provisions. It also included Federal Acquisition Regulation (FAR) 52.243-1, Changes - Fixed Price (August 1987) - Alternate I (April 1984). Exhibit 9.²

The contract contained three bid items which covered a total of slightly more than 6200 acres, and each bid item included pre-harvest and post-harvest acres. The first bid item included a survey of 676 pre-harvest acres for which New South was to be paid \$50,152.62. Exhibit 9 at 3. The survey of these 676 acres is the subject of this appeal.

The Forest Service identified Robert Morgan as the contracting officer's representative. Exhibit 10. On October 31, 2006, the Forest Service issued a notice to proceed which gave New South until November 1, 2008, to complete the work required by the contract. Exhibit 8.

When New South prepared its bid, it used the maps provided by the Forest Service as part of the solicitation in order to determine how many shaded acres within the 676 acres

² We do not know why the Forest Service did not use Alternate III, which FAR 43.205 requires to be included in fixed-price contracts for professional services. Its failure to do so does not affect the parties' rights and obligations. *G.L. Christian and Associates v. United States*, 312 F.2d 418 (Ct. Cl. 1963).

were high potential areas (176 acres), medium potential areas (155 acres), and low potential areas (345 acres). Exhibits 6, M. It multiplied the number of high and medium potential acres by the number of initial shovel tests the contract required to be made in high and medium potential areas. It multiplied the number of low potential areas by the number of shovel tests it planned to make in such areas, which was one test per acre. The Forest Service does not contend that New South's decision to make one test per acre in low potential areas is unreasonable, and we find one test per acre is reasonable when considering the contract required 4.5 shovel tests per acre for high potential areas and 2.25 shovel tests per acre for medium potential areas. New South expected to make 792 initial shovel tests within the high site potential areas (4.5 per acre x 176 acres), 349 initial shovel tests within the medium site potential areas (2.25 per acre x 155 acres), and 345 initial shovel tests within the low site potential areas (1 per acre x 345 acres), for a total of 1486 initial shovel tests within the 676 acres. Exhibit H.

When New South prepared its bid, it estimated there would be one archaeological site per thirty acres in the 6200 acres. Exhibit H. New South arrived at this estimate by examining a dozen survey reports made before and after Hurricane Hugo. The reports covered 35,000 acres. Overall, the reports showed one site per fifty-six acres. After the hurricane, the reports showed one site per sixty-one acres. More recent surveys showed one site per forty-two or fewer acres. In its review of survey notes, New South saw that site densities had increased due to more rigorous survey standards, which led New South to use an estimate of one site per thirty acres when it prepared its proposal. New South used this estimate to determine the number of sites it would find within all of the acres covered by all three bid items, regardless of an area's site potential. Using the estimate, New South expected it would find twenty-three new sites in the 676 acres (676 acres ÷ 30 acres per site). Exhibits 6, M.

When New South prepared its bid, it estimated there would be twenty-five site delineation shovel tests required for each newly discovered site. New South arrived at this estimate by looking at the average number of shovel tests shown in a recent report of work it conducted for the Forest Service in the Francis Marion National Forest. New South adjusted this number to take into account a difference in the testing requirements in effect for its previous work and the requirements in effect for the work required by the contract. The resulting average was 25.6 shovel tests per site, which New South rounded down to twenty-five site delineation tests per site. Using this estimate, New South expected to make 575 site delineation shovel tests in the 676 acres (23 sites x 25 tests per site). Exhibits H, M.

New South began its field work for the contract on November 13, 2006. Exhibit I. During its work in the 676 acres, it found the site potential maps provided in the solicitation

did not accurately reflect the amount of actual high potential areas in the field. Exhibit C. On December 14, 2006, Natalie Adams, New South's Vice President for Archaeology, met with Mr. Morgan to discuss the field work which was proceeding in the 676 acres. Ms. Adams and Mr. Morgan discussed the problems with the Forest Service's use of the forest's Geographic Information Systems (GIS) to create maps for its predictive model. They also discussed the inaccuracy and gross scale of the USGS topographical maps and the limitations of the models used to create the site potential zone maps. They agreed the digital elevation models used to create the site potential zone maps had no better resolution than the USGS topographic maps. Mr. Morgan told Ms. Adams that, because of such problems and inaccuracies, solicitations provide that "ground-truthing" of soil and topographic conditions are required once a contractor is in the field. Mr. Morgan asked Ms. Adams to send him a letter containing details of the issues New South was encountering in the field and to provide an estimate of the anticipated cost overruns. He explained he would review the letter and make a recommendation to the contracting officer as to whether New South's contract price ought to be increased. Exhibit J.

On December 15, 2006, Ms. Adams wrote to Mr. Morgan. Ms. Adams explained that based upon the Forest Service maps of 676 acres of stands of older timber included in the first bid item, New South estimated approximately one-fourth of the acreage would be high site potential areas, one-fourth would be medium site potential areas, and one-half would be low site potential areas. She said when New South prepared its bid, it anticipated it would make a total of 2061 shovel tests and that it would find one site per thirty acres, which amounted to approximately twenty-three sites within the 676 acres. New South also expected each crew member would dig twenty-seven shovel tests per day. Exhibit 6. Her statements are consistent with New South's bid documents. Exhibit H.

In her letter, Ms. Adams said New South was in the process of performing its field work in the 676 acres. As it did, it found these acres contained more areas of well-drained soils -- areas with a higher potential for containing archaeological sites -- than were shown on the Forest Service maps. Ms. Adams said that as Mr. Morgan was aware, the quality of the data contained in the soil surveys was not very good and the maps were fairly generalized and sometimes completely inaccurate. She also said that, as Mr. Morgan knew, the topographical maps did not show micro-landforms, such as small, dry rises in the swamp or low, long, dry ridges in poorly drained areas. In some instances, fairly obvious land forms were completely omitted from the maps. Ms. Adams said that as the result of its ongoing field work in the 676 acres, New South concluded that the 676 acres contained more high potential acreage than New South expected, which increased the number of initial shovel tests it needed to perform, the number of sites it expected to encounter, and the number of site delineation shovel tests it needed to perform. Exhibit 6.

Ms. Adams concluded her letter by explaining that the field work was taking longer than expected in the 676 acres due to the difference between the data New South had available when it initially estimated its costs and the actual conditions in the forest. New South asked the Forest Service for a \$45,378.16 adjustment to the contract price to compensate for the added costs of the increased work, and attached a budget sheet to show how it arrived at this figure. Exhibit 6.

After New South submitted its December 15, 2006 letter, it contacted Mr. Morgan by telephone and by electronic mail to ask about the status of its request for an adjustment to the contract price. Each time New South contacted him, Mr. Morgan said the claim was being reviewed. Complaint ¶ 11; Answer ¶ 11. The Forest Service never asked New South to change the methods it was using to complete its field work. Exhibits C, J.

The contracting officer denied New South's claim in a decision dated April 2, 2007. The decision said a review of several prior surveys showed site density could vary from one site per twenty-one acres to one site per sixty-seven acres. The decision also said that New South's written management summary of the survey of the 676 acres showed it found thirty-two sites, or one site in twenty-one acres. Therefore, said the contracting officer, the Forest Service was denying New South's claim. Exhibit 4.

New South completed its field work for the contract on April 6, 2007. Exhibit I. It used the same field directors and crew members to complete the contract work in the 676 acres as it used to complete the remainder of the contract work. Other than the work required in the 676 acres, New South completed the contract work on time and within budget. New South did not encounter any periods of bad weather or equipment or labor shortages. Exhibit M.

In June 2007, New South appealed to this Board from the Forest Service's decision. Notice of Appeal at 1. New South filed its complaint in August 2007, and attached a spreadsheet, a printout of a summary of timekeeping records, and a printout of a cost detail which showed costs other than salary costs. Complaint, Attachment G. New South's spreadsheet shows the costs it included in its bid and its actual costs as of mid-August 2006. The labor costs are divided among pre-field work activities, startup and mobilization, field work, analysis, and report preparation. Within each of these divisions, the documentation shows the job titles of the employees performing the work, their hourly rates, and the number of hours New South expected they would work and the number of hours they actually worked. The printout of the summary of timekeeping records lists categories of employees by job title and shows the number of hours each category of employee spent performing start-up work, administrative work, research, field work, analysis, and report preparation work. The spreadsheet also shows the non-labor costs New South included in

its bid, which consisted of field supplies, vehicle rental, gas and oil, per diem, lodging, laboratory supplies, curation fees, and document procurement. The actual individual non-labor costs are shown on the printout of the cost detail. Exhibit G. New South subsequently updated its cost information to include a printout of employees by name and to show the number of hours each employee spent performing start-up work, administrative work, research, field work, analysis, and report preparation work. Exhibit H.

The spreadsheet and supporting documentation show that as of mid-August 2007, New South had spent \$55,733.74 more than the amount it bid to complete its work in the 676 acres. Of this amount, \$26,881.62 was due to increased salary costs of performing field work and \$13,215.80 was due to increased costs of field supplies, vehicle rental, gas and oil, per diem, and lodging. The total of these two amounts is \$40,097.42. Attachment G. New South spent the remaining \$15,636.32 due to increased costs of performing laboratory work, curatorial work, work related to preparing the written report required by the contract, and other non-field work. Exhibits G, H.

In September 2007, New South completed a draft report of the results of its survey of the forest, and the report contains a section which explains the methods New South used when it performed its work. Under the heading of "Site Potential Model," the report says the project area was divided into areas of high, medium, and low site potential. The report explains that New South defined site potential according to soil drainage, the location of water sources, the presence of known historic sites, and old roads. The report notes that the Forest Service's solicitation included maps which showed areas of high, medium, and low site potential. However, says the report, field work showed the maps were not completely accurate and New South instructed its survey crews to make adjustments to the frequency of their shovel tests according to the actual characteristics of the areas they encountered. The report shows New South found thirty-one new sites and made a total of 2748 shovel tests in the 676 acres. Of these, 1806 were initial shovel tests and 942 were site delineation tests. Exhibit I.

Discussion

Before we turn our attention to the merits of New South's claim, we address a few issues related to the evidence upon which we base our decision, a jurisdictional argument made by the Forest Service, and the Forest Service's contentions regarding delay and breach of contract. Following our discussion of these preliminary matters, we examine the merits of the claim and damages.

Preliminary mattersEvidence

The Forest Service objected to New South's opening brief as lacking record support for several of New South's statements. Respondent's Objection to Appellant's Initial Brief at 2. To the extent either party's statements are not supported by the record, we ignore them. Two of the agency's objections merit a brief discussion.

The Forest Service says there is no evidence to support statements New South makes in its brief regarding the December 14, 2006 meeting between Ms. Adams and Mr. Morgan. The evidence in the record consists of a letter memorializing the meeting (Exhibit 6) and three affidavits from Ms. Adams (Exhibits C, J, and M) which address the information which she and Mr. Morgan exchanged and discussed during the meeting.

The Forest Service also says there is no evidence to support New South's statement that Ms. Adams telephoned and sent electronic mail messages to Mr. Morgan after she sent him the December 15, 2006 claim letter. In its complaint, New South alleged it did not receive a reply to the December 15 letter until it received the contracting officer's decision on April 2, 2007. New South also alleged that Ms. Adams "called and emailed Mr. Morgan during the intervening four months between the time she submitted her letter and the Contracting Officer's reply, to determine the status of supplemental funding. . . ." Complaint ¶ 11. In its answer, the Forest Service admitted it did not reply to the December 15 claim letter until it sent the contracting officer's decision and also admitted "that Ms. Adams called and e-mailed Mr. Morgan to determine the status of supplemental funding. . . ." Answer ¶ 11.

In addition to the objections it made to New South's brief, the Forest Service also says New South's cost claim is unsupported and suggests it might be inflated. Respondent's Opening Brief at 8. New South's evidence consists of a spreadsheet which shows the costs it included in its bid and the costs it incurred, as well as two printouts of two summaries of timekeeping records and a printout of a cost detail which lists costs other than salary costs. These documents divide New South's labor costs according to the various types of work performed and show within each division the job titles of the employees performing the work, their hourly rates, the number of hours New South expected they would work, and the number of hours they actually worked. One printout of a summary of timekeeping records lists categories of employees by job title and shows the number of hours each category of employee spent performing different types of work. A second printout lists employees by name and shows the number of hours each employee spent performing different types of

work. New South's cost claim is adequately supported by the evidence it included in the record, notwithstanding the Forest Service's suggestion to the contrary.

Jurisdiction

The Forest Service argues we lack jurisdiction to consider any increase in New South's December 15, 2006 claim for \$45,378.16 because there has been no contracting officer's decision regarding any other amount and because the December 15, 2006 claim was based upon "a gross estimate of one site per 30 acres," while the updated claim "is a total cost claim." Respondent's Opening Brief at 7-8. We reject this argument as being unsupported by either the law or the facts.

The law is clear that in an appeal from a contracting officer's decision, a contractor may increase the amount of its claim and present evidence in support of an increase, but may not raise any new claims which were not presented to the contracting officer. *Santa Fe Engineers, Inc. v. United States*, 818 F.2d 856, 858 (Fed. Cir. 1987). "A new claim is one that does not arise from the same set of operative facts as the claim submitted to the contracting officer." *Hawkins & Powers Aviation, Inc. v. United States*, 46 Fed. Cl. 238, 243 (2000). "[S]o long as the essential nature and operative facts of the claim remain unchanged, the Board has jurisdiction to consider . . . increased/modified amounts of damages first raised in pleadings . . ." *Whiting-Turner/A.L. Johnson Joint Venture v. General Services Administration*, GSBCA 15401, 02-1 BCA ¶ 31,708 at 156,622-23 (quoting *American Consulting Services, Inc.*, ASBCA 52923, 00-2 BCA ¶ 31,084, at 153,485). Updates to a claim which do not change the nature of the claim, its basic underlying facts, or the theory of recovery are allowed. *McDonnell Douglas Services, Inc.*, ASBCA 45556, 94-3 BCA ¶ 27,234, at 135,706-07.

New South claimed on December 15, 2006, that its costs increased because the 676 acres contained more high potential acreage than it expected, which increased the number of initial shovel tests it needed to perform, the number of sites it expected to encounter, and the number of site delineation shovel tests it needed to perform. The operative facts, the nature of the claim, and the theory of recovery presented in the claim have not changed. The only thing which has changed is the amount requested by New South. The updated claim does not amount to a new claim, so we do not lack jurisdiction to consider it.

Delay and Breach

New South began its field work for the contract on November 13, 2006. The Forest Service contends New South should have told the Forest Service before December 14, 2006, about the discrepancies between the Forest Service maps and actual conditions in the field.

Respondent's Opening Brief at 3; Respondent's Reply Brief at 1. Nothing in the contract, however, established a deadline by which New South was required to tell the Forest Service if there were problems with the Forest Service maps, and the Forest Service has not established that New South waited an unreasonable length of time before informing the Forest Service of such problems. Perhaps New South decided that a reasonable course of action was to wait and see whether the discrepancies between the maps and actual conditions were pervasive before it decided to tell the Forest Service there was a problem. Clearly, the Forest Service did not believe quick, immediate action to resolve the problem was required because when it learned of the discrepancies, the only action it took was three and one-half months later, when the contracting officer issued his decision. The Forest Service's reaction is understandable because discrepancies between its maps and the actual site potential of the acres which New South was surveying would not have changed regardless of when New South told the Forest Service about them. So far as our record shows, the timing of New South's notice was immaterial to a resolution of this appeal.

The Forest Service suggests New South was working slowly or inefficiently in the 676 acres for reasons unrelated to the discrepancies between the Forest Service maps and the actual field conditions. Respondent's Reply Brief at 1. We reject this suggestion because the only relevant evidence is to the contrary. New South completed nearly 90% of the contract work on time and within budget using the same field directors and crew members as it used in the 676 acres. During the survey, New South did not encounter either bad weather or equipment or labor shortages. New South did, however, encounter more high potential areas than were shown on the Forest Service maps and such areas required more initial shovel tests than other areas. The facts do not support a conclusion that New South worked slowly or inefficiently in the 676 acres.

The Forest Service contends New South breached the contract because it did not obtain the Forest Service's review and approval of New South's "site potential division" before it began its field work, as required by section II.C.3 of the contract and because it did not obtain the Forest Service's approval of New South's estimate of the average number of sites it expected to encounter per acre. Respondent's Opening Brief at 3, 6. The Forest Service says New South's "actual problem" was that it was "late in obtaining approval" from the Forest Service, and that New South proceeded at its own risk when it performed work without receiving such approval. Respondent's Opening Brief at 3, 4.

Section II.C.3 of the contract said that before New South began its field work, it would meet with the Forest Service and review information regarding the forest, classify project areas according to their site potential, and submit its proposed division of site potential areas to the Forest Service for review and approval. Our record contains no evidence to show whether New South fulfilled these requirements and no evidence to show

that the Forest Service ever expressed any concern about New South's lack of compliance if, in fact, New South did not comply. In any event, whether New South fulfilled this contract requirement is not relevant to a resolution of this appeal. New South's claim is based upon a discrepancy between information it used to prepare its bid and the actual conditions it encountered in the field, neither of which would have been affected by compliance or lack of compliance with section II.C.3.

The Merits

New South made 320 more initial shovel tests than it anticipated making when it prepared its bid. It also encountered thirty-one more archaeological sites than it expected to find and made 367 more site delineation shovel tests than it anticipated making when it prepared its bid. As explained below, the contract price should be equitably adjusted due to the increase in the number of initial shovel tests, but not due to the increase in the number of sites or site delineation shovel tests.

Initial shovel tests

The maps which the Forest Service provided to bidders shaded the acres within each stand of timber to show whether they were high, medium, or low site potential areas.³ The solicitation told bidders the maps "shall guide the Contractor in determining site potential for the purpose of work planning and cost estimation." Exhibit 11 at 6. The solicitation also required more initial shovel tests to be performed in high potential areas than in medium or low potential areas.

When New South prepared its bid, it used the Forest Service maps to determine how many of the 676 acres were high, medium, and low potential areas. New South used the solicitation's requirements for distances between shovel tests in high and medium potential areas in order to determine how many initial shovel tests it would need to make in high and medium potential areas. It used its own figure of one shovel test per acre in low potential areas in order to determine how many initial shovel tests it would need to make in such areas. Based upon the Forest Service maps, the solicitation's requirements for testing in high and medium potential areas, and its own reasonable decision regarding the number of

³ The parties disagree as to who was ultimately responsible for determining site potential. Appellant's Brief at 4, 8; Respondent's Opening Brief at 2; Respondent's Reply Brief at 2-3. Regardless of whether New South or the Forest Service was ultimately responsible for determining site potential, the initial determination of site potential was made by the Forest Service in the maps contained in the solicitation.

tests to make in low potential areas, New South estimated it would need to make 1486 initial shovel tests in the 676 acres.

The site potential maps provided by the Forest Service as part of the solicitation did not accurately reflect conditions which New South found in the field. Within the 676 acres, there were more high potential areas than New South expected when it prepared its bid.

New South made 1806 initial shovel tests, which is 320 more than it anticipated when it prepared its bid. New South completed nearly 90% of the contract work on time and within budget using the same field directors and crew members as it used in the 676 acres. During the survey, New South did not encounter either bad weather or equipment or labor shortages. The record supports only one explanation for these additional tests, which is that the contract required New South to perform more initial shovel tests in high potential areas than in medium or low potential areas and there were more high potential areas in the field than were shown on the Forest Service maps.

The solicitation required that the Forest Service maps guide bidders in determining site potential for the purposes of planning work and estimating costs, and it is clear from the manner in which New South prepared its bid that it relied upon the information contained in these maps in order to determine how many initial shovel tests it would need to perform. Problems with the maps became apparent when New South encountered more high potential areas than were shown on the maps. As a result, New South was required to perform 320 more initial shovel tests than it expected to perform. In accordance with the contract's Changes clause, New South is entitled to an equitable adjustment to the contract price to compensate for the increased costs associated with making the additional 320 shovel tests. *E.L. Hamm & Associates, Inc. v. England*, 379 F.3d 1334 (Fed. Cir. 2004); *GAI Consultants, Inc.*, ENGBCA 6030, 95-2 BCA ¶ 27,620.

Sites and site delineation shovel tests

New South's bid included the costs of making 575 site delineation shovel tests. It arrived at this number by estimating it would find one site per thirty acres, which amounted to twenty-three sites within the 676 acres ($676 \text{ acres} \div 30 \text{ acres per site}$), and by estimating it would need to make twenty-five site delineation shovel tests per site. New South found thirty-one new sites and made 942 site delineation shovel tests, which is eight more sites and 367 more tests than it anticipated when it prepared its bid.

Although the Forest Service maps did not accurately represent the extent of high potential areas within the 676 acres, these inaccuracies did not influence the estimates New South used to determine how many sites there would be and how many site delineation

shovel tests it would need to make. The solicitation did not suggest how many sites would be found in the 676 acres. New South's estimate of one site per thirty acres was based upon a dozen survey reports which New South had available, not information provided by the Forest Service. When New South prepared its bid, New South used this estimate regardless of whether an area shown on the Forest Service maps was shown as a high, medium, or low potential area. Similarly, the solicitation did not suggest how many site delineation shovel tests would be needed per site. New South's estimate of twenty-five site delineation shovel tests per site was based upon its prior survey experience and it used this estimate, not information provided by the Forest Service, when it prepared its bid. If the Forest Service maps had been accurate or if the Forest Service had provided no maps at all, New South's estimates would have been the same as the ones it used to prepare its bid.

New South bore the risk that the estimates it used when it prepared its bid might not accurately predict the number of sites it would find or the number of site delineation shovel tests which it would make. Because New South must bear this risk, it is not entitled to recover the costs it incurred due to encountering more sites and making more site delineation shovel tests than it expected.

Damages

New South claims an equitable adjustment of \$55,733.74. Although New South submitted evidence to show the amount of its increased costs, we cannot calculate precisely which part of New South's increased costs are attributable only to making additional initial shovel tests. However, the evidence presented by New South is sufficient to enable us to make a fair and reasonable approximation of its damages and the jury verdict method is an appropriate means of calculating damages and arriving at a result which is fair to both parties. *Bluebonnet Savings Bank v. United States*, 466 F.3d 1349 (Fed. Cir. 2006). The most reliable method we can ascertain for computing damages is as follows.

Of the amount claimed, \$15,636.32 is attributable to laboratory work, curatorial work, report writing, and other non-field work activities whose costs increased because New South found more sites than it expected to find. New South is not entitled to an adjustment to the contract price to compensate for these costs because, as explained above in our discussion of the merits, the Forest Service is not responsible for any increase in costs which occurred as the result of New South encountering more sites than it expected when it prepared its bid.

The remaining \$40,097.42 of New South's claim is for the increased costs of field work. New South made 320 more initial shovel tests and 367 more site delineation shovel tests than it anticipated making when it prepared its bid. Each shovel test increased the costs of field work salaries, field supplies, vehicle rental, gas and oil, per diem, and lodging. As

explained above in our discussion of the merits, the Forest Service is responsible only for the increase in costs which occurred as the result of New South making more initial shovel tests than it expected when it prepared its bid. Of the additional shovel tests made by New South, 46.6% were additional initial shovel tests. New South is entitled to an equitable adjustment of \$18,685.39, which is 46.6% of the additional \$40,097.42 it incurred for field work salaries, field supplies, vehicle rental, gas and oil, per diem, and lodging.

Decision

The appeal is **GRANTED IN PART**. New South is awarded \$18,685.39, plus interest in accordance with the Contract Disputes Act, 41 U.S.C. § 611 (2000).

MARTHA H. DeGRAFF
Board Judge

I concur:

ROBERT W. PARKER
Board Judge