ARMED SERVICES BOARD OF CONTRACT APPEALS

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Wright Dredging Company, Inc.)	ASBCA No. 52924
Under Contract No. DACW21-95-C-0066)	
APPEARANCES FOR THE APPELLANT:		Karl Dix, Esq. Anthony D. Lehman, Esq. Smith, Currie & Hancock, LLP Atlanta, GA

APPEARANCES FOR THE GOVERNMENT: Frank Carr, Esq.

Engineer Chief Trial Attorney Henry R. Richmond, Esq. Engineer Trial Attorney U.S. Army Engineer District,

Savannah

OPINION BY ADMINISTRATIVE JUDGE PEACOCK

In this timely appeal, appellant alleges that it encountered "excessive debris" constituting a Type I differing site condition (DSC) under the referenced contract for the dredging of the Savannah, Georgia harbor. Only entitlement is to be decided. We deny the appeal.

FINDINGS OF FACT

A. The Contract

Anneal of --

- 1. The referenced contract was awarded by the Savannah District of the United States Army Corps of Engineers (Government or Corps) to Wright Dredging Company, Inc. (appellant or Wright) on 12 May 1995 for dredging of the harbor in Savannah, Georgia from Stations (Stas.) 0+000 to 112+500. Performance of the contract required the operation of two dredges. (R4, tab 4; ex. G-485) The contract was solicited and awarded as a small business set aside (tr. 404).
- 2. The claim in this appeal involves the work and reaches of the channel (*i.e.*, Stas. 100+000 to 79+600) encompassed by bid items Nos. 0003 and 0004. Bid item No. 0003 called for maintenance dredging of a total estimated quantity of 187,000 cubic yards (cys.) from Stas. 103+000 to 79+600 to a depth generally of 42 feet at a unit price of \$1.25 per cy. Of the total estimated quantity, 68,000 cys. and 119,000 cys. were estimated for

"dredging to req'd depth" and payable (allowable) "overdepth and sideslope" (hereinafter overdepth), respectively. (Exs. G-484, -485 at 02100-11) Maintenance dredging involves the dredging of materials that have built up over time above the prescribed depth of the channel (tr. 325).

- 3. Bid item No. 0004 called for unclassified dredging of a total estimated quantity of 1,267,000 cys. from Stas. 100+000 to 79+600 to a required depth of 44 feet at \$1.90 per cy., with an estimated 407,000 cys. of the total in the required depth and the remaining 860,000 in the payable (allowable) overdepth. (Exs. 484, 485 at 02100-12) Unclassified dredging involves removal of materials that have not necessarily been dredged before (tr. 48, 51-54, 207). With respect to these materials, the contract stated, "Two feet of unclassified advance maintenance material is included from Stations 100+000 to 79+600... ... A typical maintenance dredge may or may not be able to remove this material" (ex. G-485 at 02100-2). The only other area of unclassified dredging was the Kings Island Turning Basin and Transition, bid item 0006, with a contract price of \$1.67 per cy. for removal of the first 159,000 cys. to a required depth of 42-44 feet and \$1.90 per cy. for removal of an estimated overdepth quantity of 93,000 cys. (exs. G-484, -485 at 02100-12). The total estimated quantity of materials to be removed was 6,597,000 cys., including overdepth, spread out over bid items Nos. 0002 through 0012. Of this total, the unclassified dredging items Nos. 0004 and 0006 comprised 1,519,000 cys. including overdepth, or 23%. (Ex. G-484) The unclassified areas, including the claim area, were the most difficult to dredge requiring removal of higher blow count (harder) materials as well as "advance maintenance" materials (R4, tab 13; ex. G-437 at 64-65, 76-77; tr. 47-48, 54-55, 206-07, 253-55, 327, 337-39).
- 4. The contract contained no estimate of the quantity of debris to be encountered but set forth a Character of Materials clause which stated in pertinent part:
 - 5.2 Current channel dredging requirements provide for a channel within Kings Island Turning Basin and from Stations 79+600 to 100+000 to a depth of -42.0 feet mlw, with 2.0 feet of allowable overdepth. The 2.0 feet of allowable overdepth dredging may or may not have been removed during previous dredging efforts. Hydrographic surveys completed after recent dredging projects show that depths in excess of -44.0 feet mlw and, in places, up to -46.0 feet mlw have been achieved. The current dredging contract will require a depth of -44.0 feet mlw with 2.0 feet of allowable overdepth. Consequently, material above -42.0 feet mlw should be shoal material. . . .

. . . .

- 5.4 Materials below -44.0 feet mlw, with the exceptions described above, are anticipated to be natural, undisturbed materials not affected by previous dredging efforts. These materials should consist of gravels, sands, silts, and clays in various mixes. . . . Blow counts for fine-grained soils are generally in the 1 to 50+ range, and blow counts for the coarse-grained soils are generally in the 30 to 100+ range. Consequently, the consistency of the fine-grained soils could be described as very soft to hard, while the consistency of the coarse-grained soils could be described as medium to very dense. In addition, the silts and clays may exhibit some plasticity with a high liquid-limit, which would cause some difficulty mixing with water if hydraulic means are used to remove the material.
- 5.5 In addition to shoal materials and undisturbed materials. inorganic and organic debris is expected. This debris could include, but is not limited to, tools and equipment, wood and metal implements and fragments, concrete masses, riprap, cable, construction rubble generated during recent widening and deepening activities, and other debris associated with maritime activities. During past maintenance, contractors have encountered substantial quantities of wood debris and stumps throughout the channel and turning basins. This has caused downtime to clear the dredge cutterhead, suction, and pumps. Dredges have experienced up to 4 hours of downtime per day for pump, suction, and cutterhead cleaning. Since this is the first maintenance dredging in some of the areas since the recent deepening contract, bidders should expect to experience similar conditions during performance of this contract. The debris encountered is a condition of the harbor and no extra payment will be made for downtime due to debris removal from the dredge cutterhead, suction or pump. The Contractor will be required to remove all inorganic and organic debris above the required dredging limits. [Emphasis added]

(R4, tab 13)

5. The contract contained the standard DIFFERING SITE CONDITIONS (APR 1984) (FAR 52.236-2) clause, and the PHYSICAL DATA (APR 1984) (FAR 52.236-4) clause including the following pertinent information:

- (f) Channel Traffic. The traffic that may be expected to use the channel during the progress of the work consists of oceangoing vessels, towboats, barges, and various small craft. According to Waterborne Commerce Statistics, in 1989 about 7,760 vessel trips were made in and out of Savannah Harbor. Navigation traffic will be using the existing channels at all hours during construction of the project. . . .
- (g) Obstruction of Channel. The Government will not undertake to keep the channel free from vessels or other obstructions The Contractor will be required to conduct the work in such a manner as to obstruct navigation as little as possible and in case the Contractor's plant and/or pipeline so obstructs the channel as to make it difficult or endanger the passage of vessels, said plant shall be promptly moved on the approach of any vessel to such an extent as may be necessary to afford a practicable passage.

. . . .

(k) Channel Conditions. . . . The latest dredgings in the inner channels were completed as follows:

Contract No. Date Stations Dredged DACW21-89-C-0003 JAN 1989 112+500 to 66+000 (maintenance dredging) DACW21-90-C-0038 APR 1990 112+500 - 0+000 (maintenance dredging) 97+750 - 69+310 (new york dredging DACW21-90-C-0081 on north side) DACW21-91-C-0077 MAR 1991 112+500 - 40+000 (maintenance dredging) DACW21-92-C-0100 SEP 1992 112+500 to 40+000 (maintenance dredging) DACW21-93-C-0071 MAR 1993 70+000 to 0+000 (deepening)

DACW21-93-C-0127 MAY 1993 103+000 to 70+000 (deepening)

DACW21-94-C-0067 MAR 1994 112+500 to 40+000 (maintenance dredging)

There are pipelines, cables, and bridges in the area to be dredged, and there may be other unknown and/or uncharted submerged obstructions, such as logs, anchors, and other debris.

(Ex. G-485 at 00800, 10-13)

- 6. The contract's Specification Section 02100, DREDGING, also contained the following relevant provisions:
 - 7.4 Debris Disposal: ... All debris and proposed disposal area locations will be reported in the daily log of operations. [Emphasis added]

. . . .

- 8. OVERDEPTH AND SIDE SLOPES (APR 1994 SAS):
- 8.1 Overdepth: . . . There was no allowance made for allowable overdepth on the deepening contract [in 1993]. There was no provision included for allowable overdepth from Station 97+750 to Station 70+000 and from Station 40+000 to Station 0+000 in the subsequent maintenance dredging contract.

. . . .

21. LEVER ROOM LOG (JAN 1994 SAS): The Contractor will maintain a daily lever room log and provide a copy of the log to the Contracting Officer at the end of each day. This log will include the following for each shutdown: date, shutdown time, reason for shutdown, and startup time.

(Ex. G-485 at 7-9, 17)

B. The Bid

- 7. Wright, the only bidder, is solely owned by Mr. Thomas J. Wright. The firm owns and operates the dredge Enterprise. The Enterprise was built in 1967 and is an 18-inch dredge (*i.e.*, the inside diameter of the discharge pipe was 18 inches) with a 72 foot long, 57 ton ladder. There is no evidence as to when the dredge was overhauled prior to performance of this contract. (Ex. G-487 at 5-8; tr. 29-30, 79)
- 8. Mr. Wright prepared a pre-bid estimate for each bid item. His pre-bid estimate priced the bid items Nos. 0003 and 0004 quantities at \$1.67 and \$2.18 per cy., respectively. However, Mr. Wright preferred not to use the Enterprise for the areas encompassed by those bid items because the dredging in those reaches he considered to be more difficult than other areas in the lower harbor. (Ex. G-483, -487 at 64-65, 73-85)
- 9. Mr. Wright solicited pre-bid quotes from potential subcontractors, including large businesses (Norfolk Dredging Company and T.L. James Company) and The M Operating Company (MOC). MOC submitted a quote to Wright for all bid items, including bid items Nos. 0003 at \$1.24 per cy. and 0004 at \$1.89 per cy. Wright's bid to the Government incorporated MOC's quote on bid items Nos. 0002 through 0007 with minor markups. On bid items Nos. 0003 and 0004, that markup was \$.01 per cy., bringing the bid amount to \$1.25 and \$1.90, respectively. Following award, appellant entered into a subcontract with MOC for the performance of the work covered by bid items Nos. 0002-0007 at the pre-bid prices quoted by MOC. (Exs. A-7, -10, G-481, -483; ex. G-487 at 65, 71-72; ex. G-488 at 89-91; tr. 36, 80, 85-86, 237, 317-18, 328)
- 10. The Government's pre-bid estimate without profit for both bid items Nos. 0003 and 0004 was \$1.48 per cy. (ex. A-14 at 2-3). There is no evidence detailing assumptions used by the Government in preparing the estimate.
- 11. MOC is solely owned by Mr. Mike Michelis and, at the time of the events in dispute, owned and operated the dredge Stuart. The Stuart, built in 1964, is a 19 inch hydraulic cutter head dredge with a 70 foot long 100 ton ladder. There is no evidence when the Stuart was last overhauled prior to this contract. Mr. Michelis could not afford major overhauls and repaired the dredge's equipment as needed. (Ex. G-488 at 5-11; tr. 28-31, 252)
- 12. Both Mr. Wright and Mr. Michelis assumed that their dredges would operate on a 24 hour per day basis. Based on their experiences on other projects with their dredges, Mr. Wright anticipated an effective running time of 18 hours per day (ex. G-487 at 28, 82-83, 93-94) and Mr. Michelis estimated an effective running time of 17-18 hours per day (ex. G-488 at 33-34; tr. 219-22, 227, 318, 323; SR4, tab 2 at 2). The remaining 6-7 hours of downtime per day were to accomplish such necessary and normal tasks as repairs/maintenance, adding pontoon and pipeline to the disposal areas, moving the dredge from station to station, moving the dredge to permit the passage of ships through the harbor, and removing debris from the pump, pipeline and cutterhead. (Ex. G-487 at 82-83; tr. 41-

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- 42, 45, 221-22, 319-20, 327) Neither Mr. Michelis or Mr. Wright made any separate prebid estimate of the portion of the six to seven downtime hours related specifically to debris removal or repairs (ex. G-487 at 82-83, 90; ex. G-488 at 36-37, 117, 123; tr. 221-23). Mr. Michelis "didn't add any more or less time" for debris than was warranted by past experience (tr. 227-29, 320). MOC had performed several contracts in the Savannah harbor since 1990 but had never achieved an effective average running time of more than 16 hours (tr. 511-515; ex. G-501).
- 13. Although both Mr. Wright and Mr. Michelis noticed the warning in the Character of Materials clause that bidders could expect up to four hours of down time per day related to debris, there is no proof as to how either one relied on that admonition in formulating the bid. The bid/contract prices were based on Mr. Michelis' prior dredging experience, with no specific adjustment made for the four hour warning (tr. 35, 40-41, 45, 74-77, 83-84, 88, 153-54, 227-28, 324). Both Mr. Wright and Mr. Michelis were aware that larger dredges had widened and deepened the harbor pursuant to a 1993 contract including the areas encompassed by bid items Nos. 0003 and 0004. They assumed prior to bidding that the larger dredges would have substantially cleaned the bottom of the harbor of debris. (Ex. G-487 at 91-92; tr. 79-80, 93, 154, 167, 227, 329-30) Mr. Michelis considered that his debris-related downtime might be less as a result and did not factor any additional time for debris into his quote (tr. 34-37, 167, 227-28; ex. G-488 at 39, 121-23). The larger dredges performing the prior widening/deepening contract may or may not have picked up substantial quantities of debris. Metal bars are routinely welded across openings to dredge cutterheads that restrict the size of the opening and deflect debris, leaving the debris in the harbor (tr. 65-66, 157, 225-27, 672-96; ex. G-487 at 12-14; ex. G-498). There is no evidence that appellant or MOC attempted to verify their assumptions concerning the amount of debris they considered would have been removed by larger dredges.

C. Performance

- 14. Appellant received the Notice to Proceed on 14 June 1995 (R4, tab 5). MOC's dredge Stuart commenced work in the claim area (Stas 100+000 to 79+600) on 21 July 1995 performing work simultaneously under bid items Nos. 0003 and 0004 until 19 May 1996. Wright's dredge Enterprise worked in the claim area during the period 24 May to 9 July 1996 from Stas. 84+210 to 79+600. The Stuart returned to work in the claim area from 7-9 August 1996. (Ex. G-1 to -477; ex. G-487 at 83-84; ex. G-488; SR4 tabs 2, 6; tr. 61)
- 15. The dredge Stuart operated round the clock in three shifts on week days and two shifts on weekends. The crew consisted of 15-20 persons on the day shift with 8-10 persons on the other shifts. (Tr. 55-57) Mr. Michelis visited the dredge once or twice a week (tr.172).

- 16. On 14 February 1996, approximately seven months after commencing work in the claim area, MOC notified Wright that it had encountered "an excessive amount of trash and debris" from Stas. 93+500 to 92+375. MOC stated that the debris had caused extensive downtime and equipment repairs. The subcontractor noted that the "debris consists of steel, rocks, iron, wood, coils of cable and other trash that is not normal to the river" and indicated that it would file a DSC claim. (Ex. A-116) Appellant forwarded the MOC letter to the Government on 19 February 1996 with notice that a claim would be forthcoming (ex. A-117).
- 17. On 27 March 1996, MOC again notified Wright that it had encountered "abnormal amounts of debris" and experienced "excessive lost time" between Stas. 87+410 to 86+825 on the north half of the channel from 7-10 March 1996 and between Stas. 87+130 and 87+015 on the south side of the channel from 19-21 March 1996 (ex. G-118). MOC also reported encountering "excessive debris" approximately 8 months before from 3-9 August 1995 while dredging between Stas. 97+610 and 97+125. Although the debris was discussed with the Corps and reported on the Quality Control Reports (QCRs) at the time, no separate written notice was provided at that time. MOC reiterated that it would file a claim. (*Id.*) The letter was forwarded to the Corps by Wright (ex. A-119).
- 18. On 17 June 1996, MOC submitted a third notice that it would be filing a DSC claim with respect to the claim area work alleging that it encountered "trash debris and rock in quantities of a much greater magnitude than was alluded to in the specifications" (ex A-120). On 19 June 1996, appellant forwarded the MOC letter to the Government and, for the first time, also notified the Government of its own intent to file a claim for "excessive amounts of trash and debris" in the bid item No. 0004 area (ex. A-121).
- 19. There is no evidence and no contention that appellant encountered materials that differed in type or character from that indicated in the contract or ordinarily to be anticipated in dredging the Savannah harbor (as opposed to excessive quantities). There are no volumetric measurements or estimates in the record of the types of material encountered or the overall volume of trash/debris dredged.
- 20. Final acceptance of the work occurred on 23 August 1996 (ex. A-124). On 28 May 1997, appellant submitted its certified claim seeking an equitable adjustment of \$717,199.75 and a 50 day time extension on account of the alleged "excessive quantity of debris" encountered during work under bid items Nos. 0003 and 0004. The claim sought compensation for three categories of downtime or lost effective running time:

 1. downtime for clearing pump/line/cutter of the dredge Stuart; 2. downtime for extraordinary damages/repairs to the Stuart; and, 3. downtime for clearing pump/line/cutter of the dredge Enterprise. Appellant did not claim that the Enterprise suffered extraordinary damages/repairs. (R4, tab 3; SR4, tabs 1-8)

D. The "Clearing" Claim Items

21. The claim was prepared by appellant's consultant, Mr. Gail Gren, of Gren Marine Consultants (tr. 348). In preparing the claim, Mr. Gren relied on data contained on the daily "Report of Operations," ENG Form 4267, prepared and submitted to the Corps by appellant. The ENG Form 4267 was one of two required daily reports prepared by appellant on this project. The other report was the "daily lever room log" (hereinafter leverman's log) required by ¶ 21 of specification section 02100 (finding 6) and filled out by the dredge leverman on each shift. The information on the ENG form 4267 was generally extracted later from entries on the leverman's logs. (Tr. 13-14, 57, 59) No member of the crews of either dredge testified at trial. The ENG Form 4267 contained a section for the listing of the following types of "Non-Effective Working Time" with space for the contractor to show the hours and minutes of downtime associated with each type:

HANDLING PIPE LINES HANDLING ANCHOR LINES CLEARING PUMP AND PIPE LINE CLEARING CUTTER OR SUCTION HEAD WAITING FOR SCOWS TO AND FROM WHARF OR ANCHORAGE CHANGING LOCATION OF PLANT ON JOB LOSS DUE TO OPPOSING NATURAL ELEMENTS LOSS DUE TO PASSING VESSELS SHORE LINE AND SHORE WORK WAITING FOR BOOSTER MINOR OPER. REPAIRS (explain in remarks) WAITING FOR ATTENDANT PLANT PREPARATION AND MAKING UP TOW TRANSFERRING PLANT BETWEEN WORKS LAY TIME OFF SHIFT AND SATURDAYS SUNDAYS AND HOLIDAYS FIRE DRILL MISCELLANEOUS (explain in remarks)

22. For each day the Stuart or Enterprise operated in the claim area, Mr. Gren extracted the downtime hours reported on the ENG Form 4267 for "clearing pump and pipe line" and "clearing cutter or suction head" and listed them on a spreadsheet. He then totaled the daily hours for the two categories for each dredge as listed on the spreadsheet and divided that total by the number of days that the dredge operated in the claim area to derive an average downtime per day for each dredge. As a result of his calculations, Mr. Gren concluded that the dredges had experienced an average daily downtime for the two "clearing" activities in the claim area of 3.88 hours per day for the Stuart and 4.76 hours per day for the Enterprise. (SR4, tabs 1, 2; R4, tab 3; tr. 408-13, 419)

- 23. After consultation with Mr. Wright and Mr. Michelis, Mr. Gren then suggested that the average daily downtime that appellant should have anticipated for the "clearing" activities was two hours per day. In Mr. Gren's opinion, the "two hour" conclusion was the only reasonable interpretation of the four hour warning in ¶ 5.5 of the Character of Materials clause. (tr. 228-29, 373-74, 389, 424) The two hour down time average estimate was first developed post bid (tr. 228, 321, 389, 424). Mr. Gren did not attempt to ascertain from the historical records of past projects either Wright's/MOC's normal downtime or what might be considered normal downtime for dredging in Savannah harbor generally (tr. 425-27). After concluding that two hours reasonably should have been anticipated, Mr. Gren subtracted the two hours from the 3.88 and 4.76 downtime hours alleged to have been actually experienced in the claim area by the Stuart and Enterprise, respectively. The claim seeks compensation for the excess hours resulting from this subtraction, i.e., 1.88 hours for the Stuart and 2.76 hours for the Enterprise per day that they operated in the claim area. (R4, tab 3; SR4, tabs 1-8) The downtime claimed was intended by Mr. Gren to serve as a "starting point" for negotiations with the Corps (tr. 381, 424). Specific problems with Mr. Gren's computations are detailed below.
- 24. The daily/hourly figures used in Mr. Gren's computations often were not proved to relate to debris. The clearing and cleaning activities noted on the source documents, *i.e.*, the ENG Forms 4267 and leverman's logs, were often not attributed to any specific cause or were attributable to clay, not debris. It is very difficult to distinguish between problems caused by the hard clays as opposed to debris in the unclassified dredging operations (tr. 252-55, 258). In addition, sometimes the dredge cutterheads were lifted for routine examination. (Exs. G-31, -32, -115, -117, -192, -193, -201, -281, -282; A-134; tr. 257-66, 312-17)
- 25. In at least one significant instance the 10 hours listed by Mr. Gren on his spreadsheets for downtime on 6 August 1995 greatly exceeded the 10 minutes ascribed to clearing delays on the source documents. Although this substantial typographical or transcription error was conceded by appellant, it has not revised the claim. (Ex. G-29, 30; tr. 267-68, 376)
- 26. There are numerous days where downtime was attributed solely to debris by Mr. Gren where in fact there were multiple causes of the downtime claimed, some non-debris-related, as well as some debris-related. Appellant has not attempted to apportion the total downtime among the multiple causes. (Exs. G-54, 56, 60, 367, 424, 487-88, 492; tr. 312-17, 475-88)
- 27. Mr. Curtis Bragg, a contract administrator for the Government, conducted several probative studies attempting to determine the amount of downtime related to debris experienced by Wright and MOC using the same source documents employed by Mr. Gren. He concluded that the average daily downtime for debris documented in the claim area was 2.0 hours for the Stuart and .7 hours for the Enterprise. In order to give appellant the

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benefit of the doubt, Mr. Bragg generally did not attempt to apportion downtime among multiple causes. Where more than one cause of downtime was listed on the daily source documents, he assigned the entire downtime to debris-related causes. Mr. Bragg's conclusions have not significantly been impeached by appellant and, based on our review of the source documents, we find them to be the better-supported estimates of debris-related downtime experienced by appellant. (Ex. G-501; tr. 455-475, 506-07, 658-59)

28. The Government's Mr. Bragg also analyzed historical data concerning the dredge Stuart's dredging of the Savannah harbor under earlier Corps contracts. Mr. Bragg concluded that the Stuart had averaged 2.2 hours per day under the prior contracts for repair-related downtime as compared with 1.8 hours per day under the instant contract. (Ex. G-501(6); tr. 523-240) Mr. Bragg also analyzed the effective running times for both the Enterprise and Stuart for the contract as a whole and concluded that neither dredge achieved an average running time of even 16 hours in the easier-to-dredge areas outside the claim area (ex. G-501(4); tr. 516-17). Finally, Mr. Bragg analyzed the Corps' historical records of the effective running times for all dredges working in the Savannah harbor from 1990 through the present contract. He concluded that no dredge had averaged 16 hours running time in the claim area and that the average for all dredges in this area was 13.6 hours. (Ex. G-501(5); tr. 517-23) Mr. Bragg's analyses and conclusions have not been significantly impeached by appellant and we find them to be the best evidence available of the normal effective running times to be anticipated in the Savannah harbor.

E. The Extraordinary Repair Claim Item

29. Mr. Gren also prepared the portion of the claim alleging that the dredge Stuart experienced extraordinary repairs and damage as a result of the "excessive debris" encountered in the claim area. Mr. Gren examined the daily reports for entries that he considered could been caused by the debris and compiled a list of the repairs for review by Mr. Michelis. Mr. Michelis determined which of the items were "probably" related to debris. Mr. Gren then totaled the repair hours that were allegedly caused by debris and ultimately concluded that the project was delayed 20.36 days because of the lost effective working time caused by the extraordinary repairs. In making his determinations as to what repairs were "probably" caused by debris, Mr. Michelis did not correlate the repairs with any particular days of operation or reports of the materials encountered on any particular day. (Tr. 256, 310-11, 352, 361-62; SR4 tabs 3, 4) Many of the alleged "extraordinary" repairs occurred on days when the Stuart was dredging clay not debris (exs. G-24, -75, -120, -121, -138, -139, -172, -173; tr. 302). In general and based on our own review of the daily reports, we consider that appellant's attempts to relate the repairs solely to debris are based on highly speculative causation assumptions that are not adequately supported by the source documents on which they are based (exs. G-1-500). More specific problems with appellant's extraordinary repairs claim follow.

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- 30. Some of the claimed repairs did not occur in the claim area. The claim computations as eventually presented included 18.8 hours of downtime for repairs that occurred outside the claim area on 5 July, 13-15 July and 19 July 1995. (SR4, tab 4; tr. 195-99, 312)
- 31. Many of the allegedly extraordinary repairs were made as much for efficiency purposes to obtain better production as to repair debris-damaged equipment. Factors affecting the amount of downtime include not only the quantity of debris but also its type and nature as well as the size and condition of the dredge and the judgment of the dredge operator, for example, with respect to the choice and installation of cutterheads, knives and bars. At various times, MOC placed knives on the pump to cut wood debris and/or bars/rings across the suction and cutter head to reduce the size of rocks/debris introduced in the dredge. Use of such knives and bars involves production tradeoffs. They are placed depending on trial and error and the best judgment of the dredger as to the type of debris that will be dredged. (Exs. G-21, -22, -28, -154-57, -278, -280, -292, -360; tr. 55, 65-67, 112-25, 130, 181-83, 199-206, 243-44, 254, 275-83, 335-36) Similarly, changes in pump runners and cutter heads are not unusual and are designed to increase production depending on the types of materials encountered, although appellant often included downtime associated with such changes as "extraordinary repair" delays (SR4, tab 4; tr. 243-44, 275-83). There is no basis in the record to conclude that these production/efficiency changes either exceeded what reasonably should have been anticipated or were caused by an excessive quantity of debris.
- 32. There is no probative evidence offered by appellant establishing the amount of downtime for repairs that reasonably should have been anticipated. Also appellant conceded that some of the repairs were normal maintenance items (tr. 225, 289-92; ex. G-396).
- 33. There were multiple reasons for some of the repair downtime claimed to have been caused solely by excessive debris. There is no evidence proffered by appellant attempting to reasonably apportion this downtime among the multiple causes. (Exs. G-84, 85, -157; tr. 307)
- 34. The contracting officer denied the claim in a final decision dated 15 April 1999 (R4, tab 2). Appellant timely appealed on 12 July 1999 (R4, tab 1).

DECISION

Wright contends on behalf of itself and its subcontractor MOC that it encountered "excessive debris" that constituted a Type I differing site condition during performance of this dredging contract. To establish entitlement to recover, appellant must prove, *inter alia*, that it reasonably relied at the time of bidding on contractual "indications" of subsurface or latent conditions in Savannah harbor that differed materially from the conditions it encountered during the dredging of the harbor. *Stuyvesant Dredging Co. v. United States*,

834 F.2d 1576, 1581 (Fed. Cir. 1987); *P.J. Maffei Building Wrecking Corp. v. United States*, 732 F.2d 913, 916 (Fed. Cir. 1984). Appellant has failed to establish that: A. the contract indicated a quantity of debris or that it reasonably interpreted the contractual provision underlying its claim; B. it relied on its alleged interpretation in bidding the contract; or, C. the conditions actually encountered differed materially from what it allegedly anticipated. Furthermore, Wright's allegations concerning extraordinary repairs do not establish a basis for recovery.

A. Indications of Quantity of Debris

Appellant does not rely on an express contractual representation of the quantity of debris that it would encounter. Rather it bases its claim on an allegedly implied contractual "indication" in ¶ 5.5 of the Character of Materials clause (finding 4) warning that, "Dredges have experienced up to 4 hours of downtime per day for pump, suction, and cutterhead cleaning. . . . [and] bidders should expect to experience similar conditions during performance of this contract." Appellant contends that since it was cautioned to expect "up to 4 hours" downtime for clearing debris, it could reasonably anticipate an "average" of two hours per day downtime for clearing activities in the claim area. Because the Stuart and Enterprise allegedly "averaged" 3.88 and 4.76 hours per day downtime, respectively, for clearing activities while dredging the claim area, appellant argues that it is entitled to an equitable adjustment for the hours exceeding the two hour per day "average." In the contractor's view, the excessive actual "average" downtime for clearing debris proves that it encountered "excessive" debris. According to Wright, the contract impliedly represented that the quantity of debris encountered would not exceed a quantity that would cause more than the two hour "average."

Although a Type I DSC claim can be founded on implied "indications," the implied representations must be logically inferable from "reasonably plain or positive" contract language that furnishes "sufficient grounds to justify a bidder's expectations." *P.J. Maffei Building Wrecking Corp. v. United States, supra* at 916-17; *Pacific Alaska Contractors, Inc. v. United States*, 436 F.2d 461, 469 (Ct. Cl. 1971); *Foster Construction C.A. and Williams Bros. Co. v. United States*, 435 F.2d 873, 875 (Ct. Cl. 1970). Here, there is simply no basis in the contract for an interpretation that Wright could expect an "average" downtime of two hours per day for clearing debris. There is no logical leap that can made from the "up to 4 hours" warning to the two hour "average" allegedly relied on in bidding. *Cf. Gulf Coast Trailing Co.*, ENG BCA No. 5795, 94-2 BCA ¶ 26,921 at 134,054-55, *aff'd*, 48 F.3d 1236 (Fed. Cir. 1995) (table); see also *Joe Brodesser, Inc.*, DOT CAB No. 73-30, 74-2 BCA ¶ 10,683. Lacking such a basis, there is no foundation for a Type I claim.

The professed two hour estimate is in fact based on post performance rationalizations of appellant, its subcontractor and its claim consultant that attempt to define a normal or usual downtime as a baseline for the claim. It is rooted in appellant's (and MOC's) own alleged prior dredging experience and knowledge of the Savannah harbor,

not the contract. This appeal has been pleaded, tried and briefed solely as a Type I differing site condition claim. However, the premise for its claim is a Type II analysis grounded on what is purported to be normal or usual. The experience of both Wright and MOC on prior Savannah dredging contracts indicates that even a 16 hour running time estimate was overly optimistic, particularly in the more difficult claim area dredging. Not only is there no contractual "hook" for the Type I claim alleged, that claim is based on an effective running time that unrealistically inflated the usual and normal experience for these dredges in the harbor.

More generally, the four hour warning in this case is not readily translatable into any "indication" of quantity. Numerous factors influence the amount of downtime for debris clearing apart from quantity, including the size, type and mix of debris, and the choices and judgment of dredge operators concerning, for example, cutterhead selection and the installation of knives and bars to best handle the extensive variety of materials to be dredged on this project. There is no evidence or contention that the size, type or mix of the materials differed from contractual indications and we will not presume on this record that appellant did not contribute to the downtime experienced through questionable choices of equipment.

We consider that the contract is replete with indications of the types and prevalence of debris and the extensive related pitfalls inherent in the project. Appellant was also expressly cautioned concerning the difficulty of removing the "unclassified" material in the claim area that was being dredged along with debris. In addition, the contract categorically states, in the same paragraph as the "up to 4 hours" warning, that "no extra payment will be made for downtime due to debris removal from the dredge cutterhead, suction or pump." Appellant ignores this clear cut allocation of the cost risks associated with clearing debris.

B. Reliance

We also do not consider that appellant relied on its alleged interpretation of the "up to 4 hours" warning in bidding the contract. Both Wright and MOC relied on their prior experience in anticipating an effective running time of 17-18 hours per day at the time of bidding. The remaining 6-7 hours of downtime per day were to accomplish the numerous tasks associated with dredging operation and maintenance (see findings 12, 21). Clearing debris was just one of the many downtime activities to be performed during the 6-7 hour period. The first estimate of downtime associated solely with debris clearing activities was formulated after completion of the work during consultations with Mr. Gren. That post performance estimate postulated that appellant should have assumed that it would experience two hours of downtime due to clearing activities. There is no proof, however, as to how either Mr. Wright or Mr. Michelis relied on the four hour warning. If anything they discounted the importance of that admonition because of their assumption that larger dredges that had recently deepened the channel would have removed much of the debris. (Finding 13) In short, Wright and MOC relied on their purported extra-contractual

experience and knowledge in estimating the impact of debris rather than any contract indications.

C. Quantity of Debris Encountered

Even assuming that appellant had reasonably interpreted the contract as implying that its average daily downtime for debris clearing would be two hours and that it relied on that interpretation prior to bidding, Wright has failed to prove that it or MOC exceeded the two hours per day average. The data and assumptions underlying its conclusions regarding the materials encountered are inaccurate and flawed.

Many of the downtime hours claimed have not been proven to be for the purpose of clearing debris. The daily source documents often did not attribute clearing activities to any specific cause or expressly stated that clay, not debris was the cause of the downtime. Frequently, the downtime was attributed to multiple causes and was not solely for the clearing of debris. However, appellant failed to apportion the total downtime among the multiple causes. (Findings 24, 26)

Wright also uses data pertaining only to the more difficult to dredge reaches (the claim area), without deriving an "average" that considers downtime in all sections of the channel. Dredging in the "claim area" involved removal of "advance maintenance," "unclassified" and high blow count materials (findings 3, 4). The vast majority of the "unclassified" yardage was in the "claim area." Particularly since the contractor failed to eliminate downtime hours for stops associated with clearing clays (rather than debris), confining its computations to Stas. 100+000 to 79+600 materially inflated the claim hours. The 4 hour warning applied to the entire channel. For consistency, the scope of the claim's average downtime should coincide with the scope of that alleged "indication."

Wright argues that the Government failed to conduct a thorough investigation of its claim and, if it had done so, would have verified that the downtime claimed was debrisrelated. Regardless of the adequacy of the Government's investigation, the burden of proof remains with appellant. Its claim relies almost entirely on the bare contemporaneous source documents to establish the extent of debris-related downtime. No crew members from either dredge explained the entries, substantiated the relationship of stops to debris encountered or approximated the debris-clearing portion of the reported downtime for entries where multiple causes were identified. Appellant was expressly required to list debris encountered in the leverman's logs. It is not entitled to inferences in its favor to the extent that it failed to satisfy that duty. Moreover, appellant's first notice that it encountered "excessive" debris was not filed until 14 February 1996, about seven months after it had commenced dredging in the claim area and pertained only to a small portion of that area (findings 14-16).

We conclude that appellant's computations materially misrepresent the downtime related to debris and we find them to be unreliable. We have further found the Government analysis of the daily source documents to be better supported, substantially unimpeached, and the most reliable evidence of the debris-related downtime actually experienced by the Stuart and Enterprise in the claim area. Those Government studies concluded that neither dredge exceeded the two hour per day baseline considered by appellant to be the amount of downtime it reasonably should have anticipated. Moreover, the final Government analyses also adopted the highly problematic assumption used by Wright with respect to non-apportionment of multiple causes of downtime. To that extent, the Government's conclusions overstated downtime proven to have been solely related to debris clearing.

D. Extraordinary Repairs

As emphasized above, the only contract "indication" allegedly relied on by appellant was the "up to 4 hours" warning in the Character of Materials clause. That admonition pertains solely to time expended clearing debris. Nothing in that clause or elsewhere in the contract is alleged to represent the amount of downtime for debris-related repairs to dredges that bidders should anticipate. Therefore, appellant's entitlement to recover for purportedly "excessive" repairs is dependent on establishing that it encountered "excessive" debris. Had appellant proved entitlement, repairs caused by the "excessive" debris would be an element of the quantum recovery. However, as we have concluded above, Wright has failed to establish that it encountered a Type I differing site condition. There is also no contention, much less proof, that the quantity of debris encountered constituted a Type II condition. In short, there is no proven contractual basis for recovering the repair costs claimed. Moreover, our findings detail numerous deficiencies in appellant's analyses of repairs that render its conclusions unreliable. Wright's analyses do not tend to support appellant's assertions that the debris encountered was "excessive." The Government's unimpeached studies determined that less downtime for repairs was experienced by the Stuart on this contract than the dredge experienced under prior contracts for dredging Savannah harbor.

CONCLUSION

The appeal is denied.

Dated: 29 August 2001

ROBERT T. PEACOCK Administrative Judge Armed Services Board

	of Contract Appeals
I concur	I concur
MADIZN OTENED ED	
MARK N. STEMPLER	EUNICE W. THOMAS
Administrative Judge	Administrative Judge
Acting Chairman Armed Services Board	Vice Chairman Armed Services Board
of Contract Appeals	of Contract Appeals
of Contract Appears	of Contract Appears
I certify that the foregoing is a true copy of Services Board of Contract Appeals in ASBCA No. Company, Inc., rendered in conformance with the B	. 52924, Appeal of Wright Dredging
Date	ed:
	EDWARD S. ADAMKEWICZ
	Recorder, Armed Services

Board of Contract Appeals