UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

GUY F. ATKINSON CONSTRUCTION COMPANY, Plaintiff, v. WASHINGTON METROPOLITAN AREA TRANSPORTATION AUTHORITY, Defendant.	Civil Action No. 95-2250 (CKK)

MEMORANDUM OPINION
(August 1, 2006)

Plaintiff, Guy F. Atkinson Construction Company ("Atkinson"), petitions this Court to overturn an administrative decision rendered by Army Corps of Engineers Board of Contract Appeals ("the Board") denying its claims for additional compensation against the Washington Metropolitan Area Transit Authority ("WMATA"). The claims arose out of excavation work that stretched from 1988 to 1990 on Metro tunnels in the vicinity of College Park, Maryland. During the excavation process, Atkinson encountered excessive water, resulting in delays and additional costs of over $5,000,000. Atkinson claims the water conditions differed materially from those indicated in its contract, and so constitute a "differing site condition" ("DSC") for which compensation is due under the contract with WMATA.

This Court may overturn the Board's decision only if it is fraudulent, capricious, arbitrary, so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence. Upon thorough consideration of the filings before the Court, the attached exhibits, the relevant case law, and the entire record herein, the Court declines to overturn the Board's decision denying

Atkinson's differing site conditions, additional wells agreement, and defective specifications claims. As such, the Court shall deny Atkinson's Motion for Summary Judgment and shall grant WMATA's Cross-Motion for Summary Judgment.

I: BACKGROUND

Prior to 1988, WMATA prepared plans for a Metro tunneling project known as Section E8a, Greenbelt Route, Contract No. 1E0081. Compl. ¶ 5. WMATA issued an Invitation for Bid on the project on February 8, 1988. *Id.* ¶ 6. The invitation solicited bids under two different tunneling methods: the conventional shield driven tunneling method and the New Austrian Tunneling Method ("NATM"). *Id.* ¶ 7. Atkinson submitted the low bid based on the conventional tunneling method, and was awarded the E8a contract in the amount of $52,546,462 on June 3, 1988. *Id.* ¶ 8. The E8a project included approximately 5,600 feet of twin parallel tunnels, an outbound tunnel and an inbound tunnel, from Station 515+35 to 571+50 on the Greenbelt route.[1] *Id.* ¶ 9.

The Contract for the project consisted of both the WMATA 1984 General Provisions and Standard Specifications for Construction Projects ("General Provisions"), and the WMATA 1988 Special Provisions, Greenbelt Route Tunnels and Cut-and-Cover Structures Section E8a, Contract 1E0081 ("Special Provisions"). *Id.* ¶ 10. The General Provisions included standard clauses for approvals, changes, differing site conditions, and disputes. *Id.* The Special Provisions included, as Appendix G, a Geotechnical Design Report. *Id.* ¶ 13. Appendix G detailed anticipated subsurface

[1] Stations are markers placed every 100 feet along the Metro track. Plus or minus denotes a number of feet toward the adjacent higher or lower numbered station, respectively. *See* http://www.wmata.com/about/MET_NEWS/pressroom/glossary.cfm (visited 7/10/06) (defining "Chain Marker" as "[a] distance of 100 feet indicated by a survey marker along the tracks identifying the distance in multiples of 100 feet to the middle of the Metro Center platform") (WMATA "Metro Glossary").

conditions, and commented extensively on methods of tunneling, soil types, and water control for the project. *Id.* ¶¶ 18-19.

A. Anticipated Subsurface Conditions Indicated in the Contract Documents

Appendix G of the Contract states its purpose as follows: "This report describes geological conditions anticipated along the route of Section E-8a Tunnels. . . . [T]he report is intended to assist prospective bidders in evaluating the requirements for supporting the tunnel; to enable the Contractor to plan his work; and to assist the Engineer in reviewing the Contractor's submittals and operations." *Id.* ¶ 18 (citing Appendix G, paragraph 1.0, p. 101-G-4). Appendix G incorporated reports on soil conditions along the route produced by WMATA's general soils consultant ("GSC"). *Id.* ¶¶ 11-17. It provided bidders with the results of soil permeability tests performed by the GSC, and described boring samples, pumping data, and other technical measures of soil conditions. *Id.* ¶ 21.

Appendix G described in detail the types of soil that bidders could expect to encounter during excavation. These soil types included P1 Plastic Clay, P1 Sandy Clay, P2 Silty or Clayey Sand, P2 Sand with Trace Silt, P2 Sand some Gravel, and P-1-P-2. *Id.* ¶ 23 (citing Appendix G, paragraph 4.1.3, pp. 101-G-24 through 26). P1 type soils are stiff clays, impermeable to water, and generally favorable for tunneling. *Id.* ¶¶ 23, 25 (citing Appendix G, paragraph 5.1.3, p. 101-G-31). The appendix indicated presence of P1 soils in more than half the excavation. *Id.* ¶ 121 (citing Appendix G, paragraph 5.1.3, p. 101-G-31). P2 soils, on the other hand, are sandy and had "proven to be distinctly unfavorable in other" tunneling projects. *Id.* ¶ 23 (citing Appendix G, paragraph 4.1.3, pp. 101-G-24 through 26); *see also Granite-Groves v. Wash. Metro. Area Transit Auth.*, 845 F.2d 330, 334 (D.C. Cir. 1988) ("It is common knowledge among contractors that sand is less

firm and more permeable to water than is clay."). Appendix G indicated presence of P2 soils at localized areas. Compl. ¶ 121 (citing Appendix G, paragraph 5.1.3, p. 101-G-31).

Appendix G described numerous times, in some detail, the locations, unfavorable behavior, and expected tunneling problems associated with the P2 soils. For instance, the Appendix described P2 sands as "[a] less favorable tunneling material" because "[t]he stand-up time in this stratum tends to be short and it is expected that the inflow of ground water may present problems." *Id.* ¶ 25 (citing Appendix G, paragraph 5.1.3, p. 101-G-31). Tunneling problems in the sandy soils should be anticipated due to "vertical drainage mak[ing] these sands vulnerable to piping, erosion, and sloughing in the tunnel heading, even with general drawdown of ground water." *Id.* ¶ 23 (citing Appendix G, paragraph 4.1.3, pp. 101-G-24 through 26). A section of Appendix G on "Anticipated Construction Problems, Ground Behavior," stated that P2 sand may be "highly permeable" with "the capacity to transmit significantly larger quantities of ground water than other soils which will be encountered," "potentially unstable," and containing "ground water which, because of the lenticular nature of the soils, especially the P-2 soils, will not be able to be rapidly drawn down." Board Opinion ¶ 22 (citing Appendix G, paragraph 10.1, R-71, p. 80-82). Appendix G noted that a particularly pervious type of P2 sand "appears at several locations, generally between Stations 525 and 540, between the top and base of the tunnels." *Id.* ¶ 23 (citing Appendix G, paragraph 4.1.3, pp. 101-G-24 through 26).

Appendix G included geological section diagrams sketching the locations of the different soil types. It emphasized, however, "that the stratification of the Cretaceous soils portrayed in the geological sections should be taken as only an approximate representation of a much more complex situation. . . . All of the lines separating individual 'strata' within the Cretaceous are indistinct or gradational and actually represent a change in depositional phase rather than an abrupt

discontinuity." Board Opinion ¶ 18 (citing Appendix G, paragraph 4.0, R-71, p. 21-26).

Appendix G noted, when discussing water conditions, that "the ground water level, as measured in 1985, is consistently well above the tunnel crown except for a limited length extending from the western limit of work at Station 512+00 to approximate Station 519. The topographic low areas are at the east end, ahead of Station 580 and center of the project, Stations 547 to 551, lying within the floodplains of the Northeast Branch of the Anacostia River, and a tributary of the Northeast Branch, respectively." Compl. ¶ 24 (citing Appendix G, paragraph 3.3, p. 101-G-19).

Appendix G addressed the subsurface conditions from Stations 538 to 545 (the areas in dispute) in detail:

> The tunnel between Stations 535+00 and 554+00 will be driven primarily through plastic clays of Stratum P1 and sandy clays of P1 (CL), overlain by sands of Strata P2 and P2 (SP-SM). The existing ground water level in this segment is generally about five to 20 feet below the ground surface and 40 to 50 feet above the tunnel crown. Because of the presence of relatively pervious material directly above much less pervious Cretaceous clays, *the tunneling could encounter a perched water table which will continually deliver water to the crown regardless of the condition of drainage in the tunnel face and invert. Dewatering within the Cretaceous clays will have relatively little influence on the upper water levels which respond to rainfall or leaking utility effects.* A potentially troublesome area is centered on Boring No. ERK-17U where the Cretaceous cover is only about 15 feet in thickness beneath a channel cut in the Cretaceous surface. Coarse grained Pleistocene terrace deposits of Stratum T3 are present directly above the Cretaceous soils, bottoming at about elevation +30, and clean sands of Stratum P2 (SP-SM) are present near the tunnel invert. *Water from a stream directly above, which is a tributary of the Northwest Branch of the Anacostia River, probably infiltrates into the pervious Stratum T3. There is the potential for water seepage at the tunnel face if pervious channels are present within the plastic clay layer underlying the T3 stratum.* Three control piezometers will be installed between Station 548 and Station 552+05 with specified drawdown of ground water . . . . The range in ground water elevations is . . . lowest but closest to the ground surface *in the vicinity of the stream at Station 549*. . . .

Id. ¶ 26 (citing Appendix G, paragraph 5.1.3, p. 101-G-33); Board Opinion ¶ 17 (citing Appendix G, paragraph 3.3, R-71, p. 19-20) (emphasis added). Paragraph 10.1 of Appendix G advised

bidders that dewatering and possibly chemical stabilization would be required between Stations 535 and 540 as well as Stations 544 and 547+50 due to pervious sand in the P-2 stratum overlying much less pervious clay in the P-1 stratum. Compl. ¶ 27 (citing Appendix G, paragraph 10.1). The Appendix contained additional information on several stations, including Stations 545+50 and 538, in a section pertaining to the NATM tunneling alternative. At Station 545+50, it noted a "Layer of P2 (SP-SM) material (sand, trace silt) within the tunnel section, *with possible hydraulic connection to the stream at Station 549+00*." Board Opinion ¶ 21 (citing Appendix G, paragraph 5.2.9) (emphasis added). At Station 538, it noted a "Layer of P2 (G) material (sand, some gravel) above the crown of the tunnels, partly covering the drifts up to 10 feet, *and with possible connection to nearby drainage courses*." *Id.* (emphasis added). The report section on "Anticipated Construction Problems" further alerted bidders that conditions between 535+ to 540+ and 544+ to 547+50+ in particular "will require dewatering of the sand and possibly chemical stabilization." Board Opinion ¶ 22 (citing Appendix G, paragraph 10.1, R-71, p. 80-82).

B. Original Contract Dewatering Requirements

The Contract required installation by the contractor, *i.e.*, Atkinson – of a dewatering system (wells, pumps, etc.) to facilitate tunnel excavation, as well as devices to monitor water control (piezometers). It required "procedures for control of groundwater performed under the supervision of specialist" and a "dewatering system which will effectively reduce hydrostatic pressure and control groundwater in soil surrounding each tunnel . . . ." *Id.* ¶ 27 (citing Contract Specifications Section 205). The Contract placed responsibility for design, installation, and monitoring of the dewatering system on the contractor. *See id.* ¶ 23-26 (citing Appendix G, paragraph 10.3.2, R-71, p. 90, paragraph 10.3.5, R-71, p. 94-95, paragraph 10.4, R-71, pp. 96-99, Contract Specifications Section 101); Compl. ¶ 35 (citing Contract Specifications Section 205). It mandated specifically

that, for the conventional tunneling method, at nine specified locations between Stations 523 to 531 and 548 to 553, the water be drawn down to a specified level at least four weeks in advance of tunneling. Compl. ¶¶ 31, 36 (citing Appendix G, paragraph 10.3.5; Contract Specifications Section 205). Further, "[a]t other than the specified locations where control piezometers are located, ground water control will also be necessary to lower the ground water level to at least one foot below the tunnel invert, or to at least one foot above the base of a permeable stratum; however, the extent of control will be determined in the field at the time of construction." Compl. ¶ 31 (citing Appendix G, paragraph 10.3.5). For the NATM alternative, "six additional control piezometers are required at locations where P-2 sand with expected high permeability is anticipated to occur at the tunnel crown," at Stations 552+60, 545+50, 538+00, 536+20, 519+50 and 515+75. Board Opinion ¶¶ 21, 23 (citing Appendix G, paragraph 5.2.9, R-71; Appendix G, paragraph 10.3.2, R-71, p. 90). According to the Contract, the contractor had to collect and submit water monitoring data, detailed dewatering system plans, and its specialist qualifications to WMATA for approval. Compl. ¶¶ 35, 38 (citing Contract Specifications Section 205; Contract Specifications Section 228). The Contract Special Provisions, again emphasizing the importance of dewatering due to potential problems, stated that "[d]ewatering criteria will be rigidly enforced." *Id.* ¶ 36 (citing Contract Specifications Section 205).

C. Atkinson's Value Engineering Change Proposal ("VECP")

After its bid was accepted, Atkinson submitted a Value Engineering Change Proposal ("VECP") in order to save both parties money. Atkinson's VECP proposed a new tunnel liner design. *Id.* ¶ 68. WMATA accepted Atkinson's VECP on October 6, 1988. *Id.* ¶ 71. As a condition of acceptance, WMATA required that dewatering be in accordance with the requirements

for the NATM alternative, due to concerns about water leakage through the new tunnel liner.[2] *Id.* ¶ 72. The parties signed a general Memorandum of Agreement ("MOA") to that effect on May 1, 1989. *Id.* ¶ 75. Details of the VECP costs, savings, liner, and water barrier would be worked out later. *Id.* ¶¶ 75-76. On August 8 and 9, 1989, WMATA and Atkinson negotiated the costs and savings of the VECP. *Id.* ¶ 77. Atkinson suggested that removal of the NATM dewatering requirements would save $500,000 and help achieve the $3 million total savings WMATA desired. *Id.* WMATA agreed to change the six additional piezometers specified for the NATM alternative from control (for which drawdown requirements would be rigidly enforced before tunneling was allowed to proceed) to observation (to provide monitoring, but for which drawdown requirements would not be rigidly enforced). Board Opinion ¶¶ 55-56, 64, 71. Atkinson was still, however, responsible for controlling ground water under the terms of the original agreement, albeit now without strict pre-tunneling enforcement. *See* Compl. ¶ 31 (citing Appendix G, paragraph 10.3.5).

The VECP savings agreement was finalized on August 11, 1989. Compl. ¶ 78. Two notes on the last page of the agreement memorialize an understanding wherein WMATA agreed to pay for additional wells beyond those required by the initial contract. The Summary Record of Negotiations Worksheet, initialed by Atkinson and WMATA representatives, included this handwritten note on the last page: "NOTE – AS OF 8/8/89 CONTRACTOR HAS INSTALLED APPROX. 40 WELLS . . . IF ADDITIONAL WELLS ARE REQUIRED, A SEPARATE CHANGE ORDER WILL BE ISSUED." *Id.* ¶ 79-80. Subsequently, a second note was written and signed at the August 11, 1989 meeting. The second note is identical to the first, except that it omits the reference to 40 wells. *Id.* ¶ 81. Only the second note was included in the final Summary Record of

[2] The NATM requirements for dewatering were more stringent than the conventional tunneling method requirements, because NATM tunneling is more vulnerable to water inflow, ground loss, and other disruptive effects of ground water.

Negotiations. *Id.* ¶ 82. A dispute later arose as to whether "additional" wells meant wells over 28 in number (as Plaintiff alleges the change in the notes shows), or over 40 in number (as WMATA alleges, and as concluded by the Board).

D. Atkinson's Dewatering System Planning, Installation, and Monitoring

As required by the Contract, Atkinson submitted its dewatering system plan to WMATA for approval. *Id.* ¶ 86. The dewatering system was designed by Atkinson's water specialist, Moretrench American Corporation ("Moretrench"). *Id.* WMATA approved Atkinson's dewatering system plan on or about December 12-13, 1988. *Id.* ¶ 89.

Following the plan, Moretrench installed 21 deep wells along the tunnel alignment between mid-December 1988 and late February 1989. *Id.* ¶ 90. After evaluation, Moretrench subsequently added larger pumps to four wells and seven additional deep wells – four in the vicinity of Station 548, and three in the vicinity of Station 525. *Id.* ¶¶ 91-92. Moretrench also installed the nine additional monitoring (non-control) piezometers along the tunnel alignment pursuant to the terms of the VECP agreement. *Id.* ¶ 94; Board Opinion ¶¶ 56, 61-64.

E. Tunneling

Atkinson commenced tunneling of the outbound tunnel in early August 1989. Compl. ¶ 111. In November 1989, Atkinson reached Station 550. Despite high water readings and the potential for water inflows as described in Appendix G of the Contract, Atkinson tunneled through Station 550 without incident. *Id.* ¶¶ 154-156. In a similar fashion, Atkinson tunneled through to Station 546+03, encountering no problems despite high water readings from NATM observation piezometers. *Id.* ¶¶ 157-163. After the Christmas holiday, Atkinson continued tunneling until it encountered water at Station 545+25. *Id.* ¶ 164. Initially, Atkinson observed water flowing into the

tunnel from the contact of the P-1 clay/P-2 sand near the crown of the tunnel. *Id.* ¶ 167. The water inflows gradually shifted to the right side of the tunnel, just above the midsection. *Id.* Due to the water inflows, Atkinson's tunneling progress slowed to 28 feet in 24 hours, then to 12 feet, and finally to four or sometimes no feet. *Id.* ¶ 168.

In a letter dated January 6, 1989, Atkinson informed WMATA that the water entering the tunnel had not stopped and constituted a differing site condition ("DSC"). Board Opinion ¶¶ 110-111. In the letter, Atkinson contended that the amount of water inflows "far exceeds those amounts originally indicated in the Contract Documents." *Id.* ¶ 111. Contemporaneous records indicate that approximately 45 gpm (gallons per minute) of water flowed into the tunnels. *Id.* ¶ 112. WMATA denied Atkinson's DSC claim. *Id.* On January 12, 1989, a sink hole on the ground surface developed almost directly over the tunneling machinery, and a sewer line was broken. *Id.* ¶ 113. Tunneling was shut down for seven days due to great inflows of water. *Id.* After water flows decreased, Atkinson continued tunneling by hand mining, advancing only 176 feet in the next eighteen days. Compl. ¶ 173. Anticipating further problems ahead, Moretrench decided to install additional dewatering wells at Stations 539+38, 538+63, 530+00, and 528+75. *Id.* ¶ 184. Atkinson continued hand mining until it reached a full face of clay at Station 540+50 on January 31, 1990. *Id.* ¶ 187.

On February 7, 1990, Atkinson hit water for the second time at Station 538. *Id.* ¶ 197. Inflows occurred at a rate of 25 to 50 gpm, initially from the top of the tunnel along the P-1/P-2 contact. *Id.* Progress again slowed from 56 feet in the previous 24 hours to only eight feet on February 7, and subsequently stopped for 41 days. *Id.* ¶ 198. Atkinson informed WMATA by letter that the water encountered at Station 538 also constituted a differing site condition ("DSC").

Id. ¶ 200. In mid-February, Moretrench installed nineteen additional wells in the vicinity of station 538. *Id.* ¶ 210. On March 23, 1990, Atkinson carefully resumed tunneling, soon encountered a full face of clay, and finished the outbound drive without additional problems. *Id.* ¶ 220-221.

On the inbound tunneling drive, Atkinson once again encountered water problems at Station 545 on October 13, 1990. Compl. ¶ 224. Atkinson again informed WMATA that the water encountered constituted a differing site condition. *Id.* ¶ 230. WMATA again rejected Atkinson's claim, reaffirming its position that the water encountered was indicated in the contract documents. *Id.* By careful mining, Atkinson proceeded tunneling, and encountered no further difficulties beyond Station 545. *Id.* ¶¶ 225, 231.

Neither Atkinson nor WMATA could definitively identify the source of the water responsible for the problems at Stations 545 and 538. Compl. ¶ 165. Atkinson contended that the expected perched water alone could not be responsible, as the inflows were too great. Board Opinion ¶ 111. Instead, Atkinson's expert Dr. James Mahar proposed that the primary source of the water was an unknown channel which cut through the left side of the tunnel. *See* Compl. ¶ 205. The broken sewer pipe may have contributed some water. The color and smell of sewer water was noted in the tunnel. Board Opinion ¶ 113. After the sewer was repaired, however, a substantial amount of water continued to enter the tunnel. *Id.* ¶ 114. There was evidence of the development of "piping," a progressive situation in which a pipe develops through the soil, allowing great water inflows, which in turn expand the pipe. *Id.* The exact cause of the water inflow was extensively probed at trial by the Board, which concluded that the water may have come from one or more of the sources indicated in the Contract. *See infra* Section III(A)(1).

F. Atkinson's Claims

Atkinson requested additional compensation for the differing site conditions and additional wells pursuant to its Contract with WMATA. The Contract's General Provisions includes standard clauses for approvals, changes, differing site conditions, and disputes. *Id.* ¶ 10. The Differing Site Conditions clause provides that:

> a. The Contractor shall promptly, and before such conditions are disturbed, notify the Contracting Officer in writing of the following:
>
> (1) Subsurface or latent physical conditions at the site differing materially from those indicated in this Contract.
>
> (2) Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for this [sic] Contract.
>
> The Contracting Officer will promptly investigate the conditions, and if he finds that such conditions do materially so differ and cause an increase or decrease, in the Contractor's cost of, or the time required for, performance of any part of the work under this Contract, whether or not changed as a result of such conditions, an equitable adjustment shall be made and the Contract modified in writing accordingly.

Compl. ¶ 236 (citing Contract, General Provisions, Article 4). Atkinson notified WMATA of the potential differing site conditions on January 6, 1989, February 7, 1989, and October 13, 1989. Board Opinion ¶¶ 110-111; Compl. ¶¶ 197, 230. Atkinson submitted a formal DSC claim for $4,014,234 on July 29, 1991. Compl. ¶ 239. The Contracting Officer later denied Atkinson's DSC claim on November 7, 1991. *Id.* ¶ 240. On June 21, 1991, Atkinson submitted a claim for $1,807,310.51 for the cost of 24 wells installed by its subcontractor that were required in addition to its first 28 wells. *Id.* ¶ 241. The Contracting Officer denied this claim as well, issuing a final decision on August 13, 1993. *Id.*

Atkinson disputed the Contracting Officer's decision. The Contract's Dispute clause provides that:

> a. Except as otherwise provided in this Contract, any dispute concerning a question of fact arising under this Contract which is not disposed of by agreement shall be decided by the Contracting Officer. . . . The decision of the Contracting Officer shall be final and conclusive unless [the Contractor appeals to the Board of Directors]. The decision of the Authority Board of Directors or its duly authorized representative for the determination of such appeals shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or is not supported by substantial evidence. . . .
>
> b. This DISPUTES article does not preclude consideration of questions of law in connection with decisions provided for in Paragraph a. above. Nothing in this contract, however, shall be construed as making final the decisions of the Board of Directors or its representative on a question of law.

Compl. ¶ 242 (citing Contract, General Provisions, Article 6). Under an agreement between WMATA and the U.S. Army Corps of Engineers Board of Contract Appeals, the Board heard Atkinson's two claims, designated ENG BCA No. 5911 (DSC claim) and ENG BCA No. 6109 (additional wells claim). *Id.* ¶ 243.

The Board conducted hearings on the claims in March 1994. The Board specifically addressed: (a) differing site conditions, (b) the additional wells agreement, and (c) defective dewatering specifications. *Id.* ¶¶ 246-248. The Board unanimously denied all of Atkinson's claims in a detailed 96-page opinion on February 9, 1995. *Id.* ¶ 247. This lawsuit seeking to overturn the Board's decision was subsequently filed in this Court on December 8, 1995.

II: LEGAL STANDARD

Pursuant to the Disputes clause of the Contract, this Court will not overturn the Board's decision unless it is fraudulent, capricious, arbitrary, so grossly erroneous as necessarily to imply bad faith, or is not supported by substantial evidence. *See supra* Contract, General Provisions,

Article 6; *see also Granite-Groves*, 845 F.2d at 333. The plaintiff bears the burden of showing the administrative record does not support the Board's decision. *Granite-Groves*, 845 F.2d at 333.

Because the Disputes clause essentially incorporates the standard of review set forth in the Wunderlich Act, 41 U.S.C. § 321, courts in this jurisdiction have relied on Federal Claims Court cases interpreting the Wunderlich Act for guidance. *See Granite-Groves*, 845 F.2d at 333; *Expressway Constr., Inc. v. Wash. Metro. Area Transit Auth.*, 676 F. Supp. 16, 17-18 (D.D.C. 1987) (citing cases). Under Wunderlich Act review standards, "the scope of judicial review is narrow, and is limited to whether there was substantial evidence" to support the Board's conclusion. *Titan Pac. Constr. v. United States*, 17 Cl.Ct. 630, 634 (1989), *aff'd* 899 F.2d 1227 (Fed. Cir. 1990); *see also Koppers Co. v. United States*, 405 F.2d 554, 558, 186 Ct.Cl. 142 (1968). Substantial evidence is "evidence which could convince an unprejudiced mind." *Titan*, 17 Cl.Ct. at 634. In cases of conflicting evidence that could reasonably be resolved in favor of either party, the administrative tribunal's decision will not be overturned. *Id.* The Court will defer to reasonable inferences drawn from the evidence by the administrative tribunal, and will accept the tribunal's preference in cases of conflicting testimony. *Id.* To overturn the tribunal's decision on a differing site condition claim in particular, "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. . . ." *P.J. Maffei Bldg. Wrecking Corp. v. United States*, 732 F.2d 913, 916 (Fed. Cir. 1984) (citing *Pac. Alaska Contractors, Inc. v. United States*, 436 F.2d 461, 469, 193 Ct.Cl. 850 (1971)).

On questions of law, the Board's interpretation is not binding, but nevertheless "is entitled to careful consideration and accorded due respect in recognition of its special expertise." *Titan*, 17

Cl.Ct. at 635; *Granite-Groves*, 845 F.2d at 334 ("where the Board's interpretation of a contract is reasonable and based on the Board's expertise, its determination, while not binding, will be given careful consideration and accorded great respect"). This Court has jurisdiction pursuant to D.C. Code §§ 1-2439 and 1-2431 (1981). *See Nello L. Teer Co. v. Wash. Metro. Area Transit Auth.*, 921 F.2d 300, 300 n. 1 (D.C. Cir. 1990).

III: DISCUSSION

Plaintiff asks this Court to overturn the Army Corps of Engineers Board of Contract Appeals' decision denying its differing site condition claims, defective watering specification claim, and additional wells claim. The Court shall address each claim in turn, beginning with Atkinson's DSC claim.

A. Plaintiff's Differing Site Condition Claims

In this section, the Court first examines the evidence supporting the Board's denial of Plaintiff's differing site condition claims, then addresses Plaintiff's argument that the Board improperly based its decision on a legal finding of negligence, and finally compares this case to a leading case from this jurisdiction with strikingly similar facts, *Granite-Groves v. Washington Metropolitan Area Transit Authority*, 845 F.2d 330 (D.C. Cir. 1988). The Court finds: (1) substantial evidence supported the Board's denial of Atkinson's differing site condition claims, (2) Plaintiff's argument that the Board improperly based its decision on a legal finding of negligence is without merit, and (3) *Granite-Groves* lends authority to such a conclusion.

Before analyzing the DSC claim, the Court will detail the relevant standards courts use in adjudicating DSC claim. The Contract's Differing Site Conditions clause provides that:

> a. The Contractor shall promptly, and before such conditions are disturbed, notify the Contracting Officer in writing of the following:

> (1) Subsurface or latent physical conditions at the site differing materially from those indicated in this Contract.
>
> (2) Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for this [sic] Contract.
>
> The Contracting Officer will promptly investigate the conditions, and if he finds that such conditions do materially so differ and cause an increase or decrease, in the Contractor's cost of, or the time required for, performance of any part of the work under this Contract, whether or not changed as a result of such conditions, an equitable adjustment shall be made and the Contract modified in writing accordingly.

Compl. ¶ 236 (citing Contract, General Provisions, Article 4). This DSC clause is "nearly identical to the typical federal differing site conditions clause." Def.'s Mot. for Summ. J. at 9 (citing 48 C.F.R. § 52.236-2). Pursuant to the clause, two types of differing conditions can form the basis for a contractor's recovery: a Type 1 claim under paragraph a(1), or a Type 2 claim under paragraph a(2). A Type 1 claim "requires that subsurface or latent physical conditions at the site differ materially from those indicated in the contract, and that these conditions be reasonably foreseeable by the contractor," while a "Type 2 claim exists when the contractor encounters an unknown physical condition at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract." *Id.* (citing *Foster Constr. C.A. & Williams Bros. Co. v. United States*, 193 Ct.Cl. 587, 435 F.2d 873, 876 (1970); *Mojave Enter. v. United States*, 3 Cl.Ct. 353, 357 (1983); *Shank-Artukovich v. United States*, 13 Cl.Ct. 346, 350 (1987)). Atkinson focuses on a Type 1 claim, because "a Type 2 claim does not exist where the government has provided indications in the contract of subsurface conditions; [here,] WMATA has included, in Appendix G of the Contract, extensive geotechnical information describing in detail the geological conditions anticipated along

the route. . . ." *Id.* (citing *Shank-Artukovich*, 13 Cl.Ct. at 350); *see* Pl.'s Mot. for Summ. J. at 8 (appealing only the Board's denial of a Type 1 claim); *see also* Board Opinion at 91.

To recover for a Type 1 differing site condition claim, a contractor must show that: (i) the contract documents represented conditions which form the basis of the contractor's claim; (ii) the contractor acted as a reasonably prudent contractor in interpreting the documents; (iii) the contractor reasonably relied on the contract's representations; (iv) the conditions actually encountered differed materially from those represented in the contract; (v) the contractor's claimed excess costs are attributable to the materially different conditions. *P.J. Maffei*, 732 F.2d at 916; *William F. Klingensmith, Inc. v. United States*, 731 F.2d 805, 809 (Fed. Cir. 1984); *Foster Constr.*, 435 F.2d at 875, 880; *Stuyvesant Dreding Co. v. United States*, 834 F.2d 1576, 1581 (Fed. Cir. 1987); *Granite-Groves*, 845 F.2d at 333; *Mojave Enter.*, 3 Cl.Ct. at 357. This case focuses on (and is resolved by focusing on) the heart of DSC claim: whether the conditions actually encountered differed materially from those represented in the contract. The Board determined that Atkinson could not make this basic showing. After reviewing the evidence, this Court upholds that well-founded determination.

1. Substantial Evidence Supports the Board's Denial of Plaintiff's Differing Site Condition Claims

In this section, the Court shall discuss Plaintiff's claims that the Board's denial of Plaintiff's differing site conditions is not supported by substantial evidence and is erroneous as a matter of law. *See* Pl.'s Mot. for Summ. J. at 8-18. The Board reviewed Atkinson's DSC claim to determine if either: (1) subsurface or latent physical conditions at the site differed materially from those indicated in the Contract or, (2) unknown physical conditions at the site, of an unusual nature, differed materially from those ordinarily encountered and generally recognized as inherent in work

of the character provided for in the Contract. Upon examination of the relevant evidence, the Board concluded that "The Contract indicated the water and soils encountered at the claim locations." Board Opinion at 83.

Plaintiff claims the Board's conclusion was capricious, arbitrary, clearly erroneous, and not supported by substantial evidence. Compl. ¶¶ 253-254. The Court disagrees. As the Board noted in its unanimous decision, "this is not a close case." Board Opinion at 84. Indeed, as the Board pointed out, the Contract documents are "replete with indications warning [Atkinson] of the precise conditions it actually encountered." *Id*. These indications include multiple descriptions in Appendix G of the unfavorable behavior and locations of P2 soils, descriptions of water sources connected to the problem areas, and explicit warnings that tunneling problems might arise in those areas. In addition, expert testimony established that the alternative explanation for the water source proposed by Atkinson was not supported by evidence.

Appendix G described numerous times, in great detail, the locations, unfavorable behavior, and expected tunneling problems associated with the P2 soils. For instance, the Appendix described P2 sands as "[a] less favorable tunneling material" because "[t]he stand-up time in this stratum tends to be short and it is expected that the inflow of ground water may present problems." *Id*. ¶ 25 (citing Appendix G, paragraph 5.1.3, p. 101-G-31). Tunneling problems in the sandy soils should be anticipated due to "vertical drainage mak[ing] these sands vulnerable to piping, erosion, and sloughing in the tunnel heading, even with general drawdown of ground water." *Id*. ¶ 23 (citing Appendix G, paragraph 4.1.3, pp. 101-G-24 through 26). A section of Appendix G on "Anticipated Construction Problems, Ground Behavior," stated that P2 sand may be "highly permeable" with "the capacity to transmit significantly larger quantities of ground water than other soils which will be encountered," "potentially unstable," and containing "ground water which, because of the

lenticular nature of the soils, especially the P-2 soils, will not be able to be rapidly drawn down." Board Opinion ¶ 22 (citing Appendix G, paragraph 10.1, R-71, p. 80-82). Appendix G also noted that a particularly pervious type of P2 sand "appears at several locations, *generally between Stations 525 and 540, between the top and base of the tunnels.*" *Id.* ¶ 23 (citing Appendix G, paragraph 4.1.3, pp. 101-G-24 through 26) (emphasis added).

Concerning water conditions, Appendix G noted that "[t]he topographic low areas [of the project] are at the east end, ahead of Station 580 and center of the project, *Stations 547 to 551, lying within the floodplains of the Northeast Branch of the Anacostia River, and a tributary of the Northeast Branch, respectively.*" Compl. ¶ 24 (citing Appendix G, paragraph 3.3, p. 101-G-19) (emphasis added).

Moreover, Appendix G specifically addressed the subsurface conditions from Stations 538 to 545 (the areas in dispute) in extensive detail:

> The tunnel *between Stations 535+00 and 554+00* will be driven primarily through plastic clays of Stratum P1 and sandy clays of P1 (CL), *overlain by sands of Strata P2 and P2 (SP-SM).* The existing ground water level in this segment is generally about five to 20 feet below the ground surface and 40 to 50 feet above the tunnel crown. *Because of the presence of relatively pervious material directly above much less pervious Cretaceous clays, the tunneling could encounter a perched water table which will continually deliver water to the crown regardless of the condition of drainage in the tunnel face and invert. Dewatering within the Cretaceous clays will have relatively little influence on the upper water levels which respond to rainfall or leaking utility effects.* A potentially troublesome area is centered on Boring No. ERK-17U [Station 550] where the Cretaceous cover is only about 15 feet in thickness beneath a channel cut in the Cretaceous surface. Coarse grained Pleistocene terrace deposits of Stratum T3 are present directly above the Cretaceous soils, bottoming at about elevation +30, and clean sands of Stratum P2 (SP-SM) are present near the tunnel invert. *Water from a stream directly above, which is a tributary of the Northwest Branch of the Anacostia River, probably infiltrates into the pervious Stratum T3. There is the potential for water seepage at the tunnel face if pervious channels are present within the plastic clay layer underlying the T3 stratum.* Three control piezometers will be installed between Station 548 and Station 552+05 with specified drawdown of ground water . . . . The

> range in ground water elevations is . . . lowest but closest to the ground surface *in the vicinity of the stream at Station 549*. . . .

Id. ¶ 26 (citing Appendix G, paragraph 5.1.3, p. 101-G-33); Board Opinion ¶ 17 (citing Appendix G, paragraph 3.3, R-71, p. 19-20) (emphasis added). Paragraph 10.1 of Appendix G advised bidders that dewatering and possibly chemical stabilization would be required *between Stations 535 and 540 as well as Stations 544 and 547+50* due to pervious sand in the P-2 stratum overlying much less pervious clay in the P-1 stratum. Compl. ¶ 27 (citing Appendix G, paragraph 10.1) (emphasis added). The Appendix contained additional information on several stations, including Stations 545+50 and 538, in a section pertaining to the NATM tunneling alternative.[3] *At Station 545+50*, it noted a "Layer of P2 (SP-SM) material (sand, trace silt) within the tunnel section, *with possible hydraulic connection to the stream at Station 549+00*." Board Opinion ¶ 21 (citing

[3] At trial before the Board, Atkinson argued that because it submitted its bid based on the conventional tunneling method, it justifiably ignored sections of Appendix G pertaining to the NATM alternative. In the Board's view, the contention "[t]hat [Atkinson] declined to read neighboring descriptions in the same document of subsurface conditions that specifically pinpoint potential dewatering problems, merely because they were placed in the NATM paragraphs, strains our credulity. In our view, to the extent that additional information pertained to the subsurface conditions that would affect dewatering, a reasonable contractor would have read it." Board Opinion at 88. In the Court's view, three points support the Board's conclusion. First, while it is possible that a reasonable contractor might not read separate sections of a contract not pertinent to his specific design proposal, in this case a reasonable contractor would do so, because the soil information in the NATM section is closely interspersed with the information in the conventional tunneling method section, and with information pertaining to both methods. Second, to prove a differing site condition claim, a contractor must show he encountered "[s]ubsurface or latent physical conditions at the site differing materially from those indicated *in this Contract*." Compl. ¶ 236 (citing Contract, General Provisions, Article 4) (emphasis added). The Contract includes all of Appendix G to the Contract, irrespective of whether the contractor chose to read it. *Accord McCormick Constr. Co., Inc. v. United States*, 18 Cl.Ct. 259, 263 (1989) ("'Contract documents' can be interpreted with considerable breadth to include not only the bidding documents (Invitation for Bids, drawings, specifications and other documents physically furnished to bidders) but documents and materials mentioned in the bidding documents as well.") (citations omitted). Third, Atkinson itself acknowledges that it "reviewed all the plans and specifications, including Appendix G" in order to prepare its bid. Compl. ¶ 45; *see also* Tr. 144-145, 171 (Atkinson Vice President Dennis McCarry testifying that he read the entire geotechnical report for the project).

Appendix G, paragraph 5.2.9) (emphasis added). *At Station 538*, it noted a "Layer of P2 (G) material (sand, some gravel) above the crown of the tunnels, partly covering the drifts up to 10 feet, *and with possible connection to nearby drainage courses.*" *Id.* (emphasis added). The report section on "*Anticipated Construction Problems*" further alerted bidders *that conditions between 535+ to 540+ and 544+ to 547+50+ in particular* "will require dewatering of the sand and possibly chemical stabilization." Board Opinion ¶ 22 (citing Appendix G, paragraph 10.1, R-71, p. 80-82) (emphasis added).

Based on the above Contract indications, the Court concludes that substantial evidence supports the Board's determination that the Contract indicated presence of significant amounts of water at Stations 545 and 538. Indeed, even Atkinson's Vice President, Mr. Dennis McCarry, testified that he read the entire geotechnical report for the project and he considered it to be "a very good report" and "probably more accurate than most jobs we ever bid." Tr. 144-145, 171.

The Board also relied on expert testimony by Plaintiff's expert Dr. James Mahar and Defendant's expert J. Patrick Powers, as well as geological profiles prepared by the project's resident geologist, Richard Connolly, in rejecting Atkinson's claim that the water came from a source not indicated in the Contract. The Board noted that "[t]he record is devoid of probative evidence tending to prove" Atkinson's contention that the water encountered did not come from the perched water table indicated in Appendix G. *See id.* at 85. The Board found Mr. Connolly's testimony and the contemporaneous record from persons in the tunnel on a daily basis "highly persuasive" in showing that "there is no corroboration in the contemporaneous record of any underground stream or channel" that could potentially constitute a differing site condition. *See id.* at 88. It also relied on Mr. Power's testimony, finding that it offered "the most logical, comprehensive and persuasive explanation and analysis of the dewatering and related technical

issues at the heart of this case." *Id.* ¶¶ 175-188. Mr. Powers, for instance, defined "perched water" as a water body "that is disconnected from or poorly connected with another water body below. Sometimes there is an unsaturated zone between the perched water and the lower water body, but not necessarily. . . . The term "perched" tells nothing about the amount of recharge to the upper water body. It is common in dewatering to encounter large quantities of recharge to a perched zone, where there is a surface stream in the vicinity as is the case here." *Id.* ¶ 182 (citing R-573, p. 36 and Tr. 1723).

The Board also noted that "reports prepared at or about the time of Dr. Mahar's visits to the site do note extensive 'piping' that could be characterized as a channel." *Id.* at 89. The potential for piping was, however, indicated in the original Contract. *See* Compl. ¶ 23 (Tunneling problems in the sandy soils should be anticipated due to "vertical drainage mak[ing] these sands vulnerable to piping, erosion, and sloughing in the tunnel heading, even with general drawdown of ground water"). It was the Board's prerogative to rely on Defendant's expert Mr. Powers in preference to Plaintiff's expert Dr. Mahar. Indeed, it was the Board's function to assess the credibility of the conflicting evidence submitted by these experts. *See Titan*, 17 Cl.Ct. at 635 (noting that a trial tribunal is in the best position to weigh evidence and assess the credibility of witnesses). Accordingly, the Court finds that substantial evidence supports the Board's conclusion that the water inflows did not come from a source not indicated in the Contract, and so did not differ materially from the Contract indications.

Concerning the timing of the water inflows, the Board observed that

> The fact that [Atkinson] may not have hit water as quickly as might have been indicated by piezometer recordings and locations is irrelevant. Slight differences in the geology of the complex soils, in particular the clay content of the P-2 materials in the crown, may have made the conditions more favorable for tunneling. . . . In any event, [Atkinson] was adequately warned that it would have to deal with the water

> sooner or later. It was simply fortunate that it did not encounter water early. In the Board's view the conditions indicated in the contract were more than sufficient to apprise the contractor of the need for increased dewatering in all three problem areas.

Id. at 91. The Court agrees with the Board's conclusion that, considering all the evidence, "the contract indications were more than sufficient to apprise the contractor of the problems that it encountered." Board Opinion at 88.

2. Plaintiff's Argument that the Board Improperly Based Its Denial of Atkinson's DSC Claim on a Legal Finding of Negligence is Without Merit

Plaintiff revisits before this Court many of the same arguments that it raised before the Board. For instance, Plaintiff argues that the Board "disregarded the significance of the control piezometers as reasonable contract indications of water problems." Atkinson Mot. for Summ. J. at 11. Before the Board, Plaintiff argued that the "Designer's control piezometer installation plan implies that high sustained water flows would not be encountered at Stations 545 and 538." Board Opinion at 82. Under the standard of review for this case, the Court is not required to, and indeed may not reweigh evidence on factual matters presented to the Board. *See Titan*, 17 Cl.Ct. at 634. In its argument that "the Board disregarded the significance of the control piezometers," Plainitff asks the Court to do precisely that. The Board's Opinion demonstrates that it considered the argument, and disposed of it in a sound analysis well-supported by factual evidence. *See* Board Opinion at 86-87.[4] Similarly, the Board addressed Atkinson's other arguments in support of its DSC claim, including that: (1) "water at Stations 545 and 538 was different in type and quantity than indicated in the contract," (2) "only relatively limited-volume, short-duration "perched" water was reasonably indicated," and (3) "the contract indicated that here would be smooth, relatively

[4] In brief, the Board agreed "that the presence of a control piezometer is one implicit indicator of the location of potential dewatering problems along the tunnel alignment," but disagreed "that the converse is also true, i.e. that the absence of piezometers at a location signifies that no problems should be anticipated." Board Opinion at 86.

uniform, transitions between the P-1 and P-2 soils." *See* Board Opinion at 83-91; Pl.'s Mot. for Summ. J. at 14-20. This Court has thoroughly reviewed the Board's Opinion, and finds the Board more than adequately addressed each of these arguments point-by-point. As the Court has already found that substantial evidence supports the Board's denial of Plaintiff's DSC claim, the Court need not revisit these arguments here.

Besides rearguing factual matters already considered by the Board, Plaintiff now argues that the Board improperly based its denial of Atkinson's DSC claim on a legal finding of negligence. Plaintiff contends that "[t]he Board inappropriately reached a number of conclusions that Atkinson negligently performed its work" and that "[t]hese conclusions of negligence are fundamental to the Board's determination that no differing site conditions existed. . . ." Pl.'s Mot. for Summ. J. at 22. In support, Plaintiff notes that the Board stated Atkinson had "greatly aggravated its water problems when it *negligently* drove through the problem areas," that Atkinson "seeks to shift the blame for its *negligence* to WMATA," and that Atkinson "negligently" disrupted surface conditions. *See id.* at 22-23 (emphasis added by Plaintiff). Plaintiff contends that these "determinations of negligence were findings of tort," and are improper because "WMATA never pleaded contractor negligence . . . as an affirmative defense. . . ." *Id.* at 10, 28. Plaintiff claims it had no notice or opportunity to present evidence on this issue. Pl.'s Mot. for Summ. J. at 30.

Plaintiff's contention has no merit. Plaintiff unfairly characterizes the Board's Opinion in multiple respects. First, the Board's "findings" of negligence do not relate to the *tort* of negligence but rather describe how Atkinson failed – at times – to adequately anticipate the water problems, and, during performance, imprudently ignored its own information warning of the existence of water. As such, the Board properly examined (1) whether the contractor acted as a reasonably prudent contractor in interpreting the contract documents, and (2) whether the contractor's claimed

excess costs are solely attributable to the materially different conditions, *i.e.*, whether the contractor had proven causation. *See McCormick Constr. Co., Inc. v. United States*, 18 Cl.Ct. 259, 263 (1989) ("the contractor must demonstrate that its claimed excess costs were solely attributable to the materially different subsurface conditions within the contract site") (citing *P.J. Maffei*, 732 F.2d at 916); *Granite-Groves*, 845 F.2d at 340.

Throughout its Opinion, Board alternately referred to Atkinson's interpretation of the site conditions indicated in the Contract and Atkinson's decisions while tunneling as "unreasonable in the face of the express Appendix G warnings," "negligent," "unreasonable," exercising "bad judgment" or "poor judgment," "[im]prudent," and "consciously assum[ing] the tunneling risk." Board Opinion at 86-96. In discussing the DSC claim in particular, the Board focused primarily on whether Atkinson's interpretation of the Contract was reasonable. *See* Board Opinion at 86-91 ("The contractor's alleged general understandings of the length and duration of perched water flows were *unreasonable in the face of the express Appendix G warnings*." ; "any comparison of [Atkinson's] allegedly *reasonable expectations concerning volume and duration*, with the post-sinkhole, actual conditions is fundamentally flawed." at 86; "Merely because piezometers were specified for isolated higher risk locations, does not mean that [Atkinson] *reasonably could expect* trouble-free excavation throughout the rest of the tunnel." at 87; "the sinkhole incidents that drastically aggravated and increased [Atkinson's] dewatering responsibilities." at 89; "[Atkinson] presented no evidence of the reasonableness of its own [dewatering] plan and how that plan was developed." at 90; "[Atkinson] has not otherwise proved that the quantity exceeded the amount that *it reasonably should have anticipated*." at 91) (emphasis added). As such, the Board properly "place[d] itself into the shoes of a reasonable and prudent contractor and decide[d] how such a

contractor would act in [the] situation." *P.J. Maffei*, 732 F.2d at 917; *see also Granite-Groves*, 845 F.2d at 340 ("a reasonable contractor would have foreseen the unfavorable mining conditions encountered"); *Youngdale & Sons Constr. Co. v. United States*, 27 Fed.Cl. 516, 535 (1993). Assessing what conditions a reasonable contractor should have anticipated based on the Contract indications was properly the Board's function, and, as previously discussed, the Contract was replete with indications that significant amounts of water reasonably should have been anticipated in the problem areas. *P.J. Maffei*, 732 F.2d at 917; *Granite-Groves,* 845 F.2d at 340.

Second, in discussing Atkinson's differing site conditions claim, the Board noted that "the contractor greatly aggravated its water problems when it negligently (discussed infra) drove through the problem areas causing sinkholes on the surface, [] drastically altering the subsurface conditions. As a result, any comparison of [Atkinson's] allegedly reasonable expectations concerning volume and duration, with the post-sinkhole, actual conditions is fundamentally flawed." Board Opinion at 86. In this segment, the Board properly addressed whether Atkinson had proven that any differing site conditions existed, and whether, if any existed, they had caused Atkinson damages. The Board found Atkinson's evidence on both points insufficient to meet Atkinson's burden of proof, in light of substantial evidence showing the site conditions actually encountered were specified in the Contract documents, and in light of substantial evidence (discussed below in Section III(B)) showing that Atkinson's own imprudent actions caused increased costs.

Furthermore, Plaintiff's argument that it had "no notice or an opportunity to present pertinent evidence" on the negligence issue is unconvincing.[5] Pl.'s Mot. for Summ. J. at 30.

[5] Given the context, and meaning of the Board's negligence language, the Board's statements about negligence do not constitute an affirmative defense that WMATA somehow failed to plead. Moreover, in light of the significant role Atkinson's imprudent or negligent actions played during the course of depositions before trial and at trial before the Board, detailed *infra* Section III(B), the Court cannot agree with Plaintiff's argument that it had "no notice or an

Atkinson's negligent actions bore directly on assessment of Atkinson's theory for the water's source, were extensively briefed at trial before the Board, including by Atkinson's own experts, and figured prominently in Atkinson's own arguments attempting to shift blame onto WMATA for the dewatering problems. Compl. ¶ 165 (Atkinson's expert Dr. James Mahar: "The sinkholes did not pass through any known permeable water-bearing formations. . . . Moreover the second sinkhole was located approximately 200 ft. from the Sp-Sm sand in the T-3 unit at approximate Station 548 . . . . The ground losses and chimneying did not disturb the soils encountered in the Inbound tunnel and the P-2 (SP-SM) sand in the channel on the right side of the Inbound tunnel."); Board Opinion at 93 ("Atkinson even suggests that WMATA should have stopped its tunneling operations and made it comply with the one foot drawdown requirement, a requirement that it also, at times, has argued is impossible."). The Board addressed Atkinson's imprudent actions partly in response to Atkinson's own arguments shifting blame for dewatering failures and delays onto WMATA. *See id.* at 91-94. The Board rebutted Atkinson's arguments in a section of its Opinion on pages 91-94, after concluding on pages 82-91 that no Type I or Type II differing site conditions existed.

Because (1) the Board properly based its decision on a thorough, detailed comparison of the site conditions indicated in the contract with the site conditions actually encountered and (2) in context, the Board's discussion of "negligence" appropriately addressed (i) the reasonableness of Atkinson's interpretation of the contract documents, (ii) Atkinson's failure to prove that any differing site conditions existed and, if any existed, caused the increased costs, and (iii) Atkinson's own arguments attempting to shift blame to WMATA, the Court finds no merit to Atkinson's

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opportunity to present pertinent evidence" on the negligence issue. The record conclusively demonstrates that Plaintiff had more than adequate opportunity to present, and in fact did present, evidence on the "negligence" issue. *See Conley v. Gibson*, 355 U.S. 41, 47, 78 S.Ct. 99, 2 L.Ed.2d 80 (1957) (purpose of pleading requirements is to give fair notice of the grounds upon which a claim or defense rests).

contention that the Board's finding of "negligence" improperly prejudiced its denial of Atkinson's DSC claim.

3. A Leading Case from this Jurisdiction Lends Authority to the Court's Decision Not to Overturn the Board's Decision

In *Granite-Groves v. Washington Metropolitan Area Transit Authority*, 845 F.2d 330 (D.C. Cir. 1988), the plaintiff contractor sought to overturn a Corps of Engineers Board of Contract Appeals' decision denying claims nearly identical to the instant claims. The contractor had encountered significant water inflow at two sites during excavation of Metro tunnels, due to high water content in P2 sands. The Circuit Court declined to overturn the Board's decision where the original contract indicated, *inter alia*, that at the first site "the possibility of seepage flow during construction is much greater than in other portions of Section D008. . . ." *See id.* at 339. The court did overturn the Board's decision, however, relating to the other site, where none of the contract documents "suggested that there would be any difficulty between Stations 180+00 and 178+50." *See id.* at 340. In this Court's opinion, the facts of the instant case place it squarely within the former analysis. Indeed, the Contract at issue contains even more numerous and explicit indications identifying possibilities of significant water flow near Stations 545 and 538.[6]

In sum, the Contract's indications of significant expected water in the problem areas, together with the expert testimony and records relied on by the Board, provide substantial evidence in support of the Board's conclusion that the conditions encountered did not materially differ from those described in the Contract. The Board's denial of Atkinson's DSC claim shall, accordingly, not be overturned.

[6] Possibly, after several years litigating DSC claim for essentially failure to adequately describe expected water problems in Metro tunnel excavation projects, by 1988 WMATA paid increased attention to explicitly identifying such problem areas in its contracts.

B. Plaintiff's Contractual Claim Regarding Compensation for Additional Wells

Plaintiff contends that the Board's interpretation of the VECP agreement for additional wells is erroneous as a matter of law. Pl.'s Mot. for Summ. J. at 20-22. Plaintiff argues that the Board's conclusion that Atkinson was responsible for wells number 29 through 40 is an erroneous interpretation of the agreement memorialized in the two notes on the last page of the VECP MOA described above. *See id.* The first note provided that:

> NOTE-AS OF 8/8/89 THE CONTRACTOR HAS INSTALLED APPROX. 40 WELLS, THE CONTRACTOR HAS BEEN ABLE TO REACH THE DRAWDOWN LEVEL AS SPECIFIED PER METHOD BID, PER AGREEMENT BETWEEN THE CONTRACTOR AND THE ACTING DIRECTOR OF CONSTRUCTION NO ADDED COST WILL BE APPLIED TO THIS VECP. HOWEVER, IF ADDITIONAL WELLS ARE REQUIRED, A SEPARATE CHANGE ORDER WILL BE ISSUED.

Compl. ¶ 79. The final note provided that:

> NOTE-AS OF 8/8/89 THE CONTRACTOR'S CURRENT DEWATERING PROGRAM HAS BEEN ABLE TO REACH THE DRAWDOWN LEVEL AS SPECIFIED PER METHOD BID, PER AGREEMENT BETWEEN THE CONTRACTOR AND THE ACTING DIRECTOR OF CONSTRUCTION NO ADDED COST WILL BE APPLIED TO THIS VECP. HOWEVER, IF ADDITIONAL WELLS ARE REQUIRED, A SEPARATE CHANGE ORDER WILL BE ISSUED.

Compl. ¶ 81. Based on these notes and the testimony of Mr. Yerdon, a WMATA officer, the Board concluded, "As best we can tell, the Resident Engineer did agree to compensate [Atkinson] for all wells exceeding 40." Board Opinion at 95. In support of this conclusion, the Board cited evidence showing that the "final note assumed that [Atkinson] planned to install the full complement of 40 wells before seeking additional compensation for more wells." *Id.* ¶ 70 (citing Tr. 940-43, 947-52, 963, 968, 1207-13, 1393-99, 1427-29, 1446-1450, 1471-73; A-226, p. 148-9, 156-7).

The Court finds the notes alone ambiguous as to whether "additional" wells meant wells in excess of 28 or 40. In the context of the note, additional wells appears to mean wells not

contemplated by "Contractor's current dewatering program." The content of the "current dewatering program," and consequently the meaning of the note, is a factual matter within the purview of the Board to determine. As such, this Court reviews the Board's factual determination concerning the number of wells only to see if it is or is not supported by substantial evidence. On this point, the Court finds the Board carefully considered multiple sources of evidence in reaching its conclusion on this ambiguous, hotly-contested issue. The Court therefore declines to overturn the Board's factual determination regarding the content of the additional wells agreement.

After reaching the conclusion that WMATA agreed to compensate Atkinson for wells required in excess of 40, the Board refused to award Atkinson compensation for any of the additional wells. The Board felt that Atkinson "was directly at fault for increasing the number of wells required," and so should not receive compensation for wells 41-52. *See id.*; Compl. ¶ 241. The Board reasoned that "had [forty wells] been installed, operating and properly monitored for a reasonable period of time, it is doubtful that [Atkinson] would have encountered significant problems." Board Opinion at 96. The Board found that "any agreement" – whether for 28 or 40 wells – "assumed that [Atkinson] would actually install the wells before it drastically altered the contractually indicated subsurface conditions through its negligence." *Id.* at 96. In other words, the Board interpreted the additional wells agreement to implicitly require that Atkinson's dewatering program comply with Contract requirements. Atkinson would receive compensation for additional wells only if such wells were needed after Atkinson adequately discharged its contractual obligations in operating the dewatering program.

In the Court's view, the Board's findings that (1) the agreement implicitly required that Atkinson's dewatering program comply with Contract requirements before compensation would be awarded, and (2) that Atkinson did not adequately discharge its contractual obligations in operating

the dewatering program, are both supported by substantial evidence, and are not arbitrary, capricious, or erroneous as a matter of law.

First, there are no indications (and no contention by Plaintiff) that the VECP agreement note changed any of the original Contract dewatering requirements. The Contract required installation by the contractor, *i.e.*, Atkinson – of a dewatering system (wells, pumps, etc.) to facilitate tunnel excavation, as well as devices to monitor water control (piezometers). It required "procedures for control of groundwater performed under the supervision of specialist with experience" and a "dewatering system which will effectively reduce hydrostatic pressure and control groundwater in soil surrounding each tunnel . . . ." Board Opinion ¶ 27 (citing Contract Specifications Section 205). The Contract placed responsibility for design, installation, and monitoring of the dewatering system on the contractor. *See id.* ¶ 23-26 (citing Appendix G, paragraph 10.3.2, R-71, p. 90, paragraph 10.3.5, R-71, p. 94-95, paragraph 10.4, R-71, pp. 96-99, Contract Specifications Section 101); Compl. ¶ 35 (citing Contract Specifications Section 205). Based on this agreement, the Board properly emphasized that "WMATA purchased Atkinson's dewatering expertise, including the expertise of its highly experienced specialty subcontractor, Moretrench." Board Opinion at 94.

The agreement itself states that "Contractor's current dewatering program has been able to reach the drawdown level as specified per method bid. . . . However, if additional wells are required, a separate change order will be issued." Compl. ¶ 81. Because Atkinson was responsible for designing, installing, and monitoring the system, it is reasonable to interpret the phrase "Contractor's current dewatering program has been able to reach the drawdown level as specified per method bid" as an implicit requirement that all indications suggested Atkinson had met at the time the agreement was reached, and that Atkinson needed to continue meeting, before a change order would be issued. Atkinson insisted on not including the strict NATM dewatering requirements as part of the VECP,

changing the NATM control piezometers to observation piezometers – but this change added to, and did not reduce, the Contract's original dewatering program requirements. As such, the Board's interpretation of the additional wells agreement that compensation would be awarded for additional wells over 40 in number *only if* Atkinson complied with the Contract's dewatering requirements is neither arbitrary, capricious, or erroneous as a matter of law.

Second, the Board concluded that Atkinson had "exacerbated its difficulties by failing to take protective measures to drawdown the water prior to excavating the problem areas in dispute." Board Opinion at 96. The Court finds that this conclusion is supported by substantial evidence, and is not arbitrary, capricious, or erroneous as a matter of law. The Board cited extensive evidence to support its finding, as seen through this sampling of ten (10) excerpts from its Opinion:

1. "In early December 1989, Atkinson approached OB [Outbound] Station 547+00. (A-224, at Exhibit 8 sheet 1 of 2). The water levels in one of the wells (W547) in the vicinity was reading "high" indicating that the drawdown level had not been achieved. (Tr. 635-651, 653, 657; R-152, R-448, R-573)." Board Opinion ¶ 100.

2. "Review of the CP-N2 soil samples [taken by Moretrench (R-582; Tr. 2095)], well pump data from wells in the vicinity of Sta. 545, and the CP-N2 piezometer readings should have alerted Atkinson to the water problems it subsequently encountered in tunneling through Sta. 545 OB. (Tr. 665, 1669-73, 749-51; Exh. R-490, R-495; R-573)." *Id.* ¶ 102.

3. "Atkinson's Project manager reported that '[t]he drive is approaching a possible problem area which consists of a water bearing sand layer that should be within 5 feet of the crown.'" *Id.* ¶ 103. During his deposition, Atkinson's Project manager testified that although Atkinson knew the water reading in piezometer CP-N2 "was high" and "we were concerned about the readings in CP-N2," Atkinson decided not to take any specific action. *Id.* ¶ 104 (quoting A-226 at 42-3; Appellant's Response to RPF 197). Instead, Atkinson decided to simply *"carry on because we had just passed CP-N1 piezometer under exactly the same circumstances, and when we passed CP-N1, we didn't have a problem until later*." *Id.* (emphasis added).

   Atkinson felt comfortable with this decision partly because Mr. John Donohue from Moretrench "had a theory that . . . that piezometer was reading the wrong water, that the high water levels it was reading was not the water we were going to encounter in the tunnel." *Id.* Mr. Donohue stated that Atkinson "said that they could proceed,

even in light of these kinds of readings. *We just didn't understand that it would come to the type of situation which ultimately developed, that being a very large quantity of water*." *Id.* ¶ 106 (quoting Tr. 668) (emphasis added by Board). Atkinson expected to encounter only "nuisance water," encompassing flows of 40-50 gpm. *Id.* ¶ 106 (citing Tr. 1440, 1467-70, 1553; Appellant's Response to WPFs 209 and 211).

4. After water inflows developed near Station 545, "Atkinson continued to drive the tunnel slowly by handmining" "*[d]espite extensive water inflows*." *Id.* ¶ 113 (emphasis added). As a result, "[o]n January 12, the clay layers above the tunnel were breached and a sink hole on the surface developed almost directly over the shield. As a consequence of the subsidence a sewer line was also broken. Increased volumes of water from various sources, including the sewer, originating above the clay bed flowed through fracture channels in the clay and into the tunnel. The color and smell of sewer water was noted in the tunnel. (Tr. 194-5, 1259, 1839; R-10; R-11; R-12; R-256; R-371; R-496; R-573; A-7; A-13; A-125; A-226; R-460)." *Id.*

5. "After the sewer was repaired, a substantial amount of water continued to enter the tunnel. (Tr. 195; A-113 p. A025577-95; R-460 (Face Sketch 82); R-12 supplements). There was evidence of the development of 'piping.' (R-479, Sketch 235; Tr. 1844). In some kinds of soils the flow of water generates a pipe. Once the pipe has developed, it is a progressive situation. The pipe offers a larger surface area into which water can infiltrate, so the rate of water flow and the rate of erosion increase, usually leading to a structural collapse of the ground at some point, not necessarily close to the pipe. (Tr. 430; Appellant's Response to WPF 34)." *Id.* ¶ 114.

6. "On January 10, 1990, Atkinson and WMATA met to discuss dewatering and the water recently encountered at OB Station 546. (A-119). At this meeting, WMATA warned Atkinson that it likely would experience the same problem farther along at OB Station 538. (A-119, p. M010390; Tr. 1310, 1520). Among other issues, the parties discussed how Atkinson would address this possibility. (A-119). Specifically, Atkinson explained to WMATA that additional wells would be installed in the area as recommended by Moretrench. (A-119, p. M010391; R-234; A-226, p. 44-45)." *Id.* ¶ 125.

"On January 17, 1990, Moretrench began installation of three additional wells . . . in the vicinity of OB Station 538. . . . These wells began operating on January 31, 1990. (R-455; Tr. 569, 801)." *Id.* ¶ 126. Although the wells "caused extensive lowering of water . . . in the vicinity of OB Station 538 between January 31 and February 7, 1990," "[t]ests performed by Moretrench indicated that the specified drawdown level had not been achieved. (Tr. 572-573). *Atkinson nevertheless elected to continue tunneling into the area with knowledge that there was water still in the soil near the crown of the tunnel. Moretrench was unable to determine if additional wells were necessary prior to reaching Sta. 538 because there was*

such a limited time between initial operation of those wells and the arrival of the shield [on or about February 7, 1990]. . . . There were no discussions with Mr. Donohoe on the advisability of adding wells. . . . Moretrench had not evaluated the soil boring information that it had for CPN-3 and did not mark water levels on its working drawing for this location. . . . Well W537 also indicated that the water extended 12 feet above the P1 clay/P2 sand contact. (Appellant's Response to WPF 289). These water levels indicated that dewatering had not been achieved. (Tr. 572, 676, 1682-83; R-460; R-573; R-575; WPF 186 and 265-267)." *Id.* ¶ 127 (emphasis added).

Mr. Neil Rackstraw had earlier suggested in January 1990 that "[a]dditional wells would lower head to 5' above [the tunnel] crown" near Station 537, and that the "[p]otential does exist in this area for the same problems as we have at present [near Station 545]." *Id.* ¶ 122 (quoting WPF 241; R-451).

7. Later, "[o]n March 16, 1990, a 12 foot sink hole developed at the ground surface. (A-224, p. 43; A-178; A-159, p. A026235)." *Id.* ¶ 142. The Board found that "*The inflow of water [into the tunnel] also allowed large amounts of material to be transported into the tunnel. (R-322). The loss of this material altered the pre-existing conditions. In particular soil samples taken between March 13-16, 1990 revealed a difference in the materials coming in. The difference in the materials evidences the progression of the collapse to other layers and resulted in the material being carried into the tunnel.* (Tr. 1820-25; R-322)." *Id.* ¶ 140 (emphasis added).

8. Near Station 545 on the inbound drive, "[t]he sinkhole ground loss and severe disruption of the strata that occurred during the outbound tunnel drive at OB Sta. 545, also worsened the conditions at IB Sta. 545." *Id.* ¶ 145 (citing Tr. 589-90, 1680, 1687, 1845, 1849, 1938, 1978-9; R-573). The Board supported this conclusion by quoting from a draft report dated June 10, 1990, prepared for Atkinson by Atkinson's consultant, Mr. McCusker. *Id.* ¶ 145.[7] The Board also

[7] McCusker's draft report concluded, in the relevant part cited by the Board:

> [t]he influx of muddy water noted some time after tunnel excavation had been halted was undoubtedly due to flexure and failure of the overlying clay bed, permitting surface perched water to flow through the fracture channels in the clay. The eventual sink hole at the surface was the final reflection of the subsurface ground loss. It is probable that substantial voids and fracture zones remain unfilled and that these extend substantial distances away from the tunnel center line.
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>
> [I]t is highly probable that the undermining of the overlying clay, which led to its initial collapse is continuing. If there is active channelized ground water flow, the

quoted Mr. Neil Rackstraw's concern that "the events in January 'created a dynamic regime of erosion and channeling at the affected stations. (A-194, A-195, M008013). WMATA also noted that the subsurface changes had occurred because of the OB tunnel drive (Id.) Mr. Bock provided a description of the evidence of effects in terms of subsidence and ground movement. (R-381, pp. 1-3, Fig. 1). The primary problem anticipated related to piping (R-381)," which in fact later developed on or about October 13, 1990. *Id.* ¶¶ 145, 146.

9. Due to the development of piping, the ground loss, and disruption of subsurface conditions, water "flows of about 50gpm were entering from the [inbound] tunnel's right side [near Station 545]. (R-403). Based on this information, Mr. Donohoe informed Atkinson that he believed that it would 'not be possible to pick up the flow entering the tunnel with a supplemental well installation with any degree of assurance.' (R-403; *see also* Tr. 589-90). Mr. Donohoe believed that the additional wells would not be required because the OB tunnel, itself, was acting as a horizontal drain." *Id.* ¶ 150. In other words, due to the disruption in subsurface conditions, additional wells would not be effective. Atkinson's expert Dr. James Mahar also observed "the channeling ground in the face of the tunnel" during his site visit on October 12-13, 1990. *Id.* ¶ 152.

10. The Board also relied upon, as was its prerogative, on testimony from WMATA's expert Mr. J. Patrick Powers in resolving the "extensive disagreement among the experts on . . . the technical issues in this appeal." *Id.* ¶ 175. The Board concluded that "the evidence presented by . . . Mr. Powers offers the most logical, comprehensive, and persuasive explanation and analysis of the dewatering and related technical issues at the heart of this case." *Id.*

    Mr. Powers observed, concerning the water problems at Station 545, that "As in the case of Reaches 1 and 2 [Reaches 1, 2, and 3, refer to Stations 545 and 538 on the outbound drive, and Station 545 on the inbound drive, respectively], it appears that [Atkinson] continued tunneling operations even though available information indicated that high groundwater was present within a pervious material. . . . In my opinion, the conditions in Reach 3 were aggravated by the immediately adjacent loss of ground which occurred during the Outbound tunnel drive through Reach 1. (R-

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> erosion and soil transport mechanism will continue to operate in areas which will remain undetectable until a sewer or gas main is fractured, foundation settlement occurs or another sink hole appears.
>
> Quite apart from the uncontrolled hazard to public safety, soil conditions of the second bore have now been rendered unpredictable. . . . It is probable that an extensive search for ground voids will be needed, followed by a sustained program of injection of fill material through closely spaced holes.

Id. ¶ 145.

> 573, p. 58-60)." *Id.* ¶ 176. In Mr. Power's expert opinion, "there was sufficient area to take the corrective action before large tunnel inflows were encountered in Reach 2." *Id.* ¶ 177 (quoting R-573, p. 56-59). After recounting technical indications showing that water inflows should be anticipated, Mr. Powers concluded that "in September the dangerous condition was revealed, while there was ample time to mitigate it. But no additional wells were installed." *Id.* ¶ 178 (quoting R-573, p. 43-45, 53-54). Mr. Powers further commented that his review showed "the connection to the stream was enlarged allowing more water to drain into the tunnel than would have been anticipated from the original condition" and that Atkinson, "in electing to accept the water at the face of water levels in violation of the specifications, was unprepared to deal with the resulting conditions and underestimated the consequences of the ensuing loss of ground." *Id.* ¶ 179 (quoting R-573, p. 49-50). Mr. Powers also described how "[a]fter the extensive ground loss, the groundwater regime had been altered significantly, and any comparison of the later conditions with those described in the contract documents is irrelevant." *Id.* ¶ 181 (quoting R-537, p. 41-42, 50-51). Mr. Powers documented these conclusions with extensive technical analysis, well pumping data, boring data, and soil data, also recounted in part in the Board's Opinion, paragraphs 174-188.

As seen through these ten selected summary excerpts, the evidence relied upon by the Board is voluminous. Most significantly, Atkinson knew the water reading in piezometer CP-N2 near Station 545 "was high" and although "concerned about the readings in CP-N2," Atkinson decided not to take any specific action. *Id.* ¶ 104 (quoting A-226 at 42-3; Appellant's Response to RPF 197). Instead, Atkinson decided to simply *"carry on because we had just passed CP-N1 piezometer under exactly the same circumstances, and when we passed CP-N1, we didn't have a problem until later*." *Id.* (emphasis added). The Board characterized Atkinson's decision not to take any specific action despite high water readings indicating the contractual drawdown requirements had not been met as "not making a serious effort to comply with contractual drawdown requirements," "tak[ing] a calculated risk," and simply "play[ing] Russian roulette" until "[i]ts good luck ran out." *Id.* ¶ 106 and at 94. The initial failure to dewater in compliance with Contract requirements led to ground loss, sink holes, and "severe disruption" of the subsurface conditions. *Id.* ¶ 145. The disruption of subsurface conditions in turn exacerbated the water inflow problems, by,

among other things, breaking a sewer line, and causing piping, a "progressive situation" in which "[t]he pipe offers a larger surface area into which water can infiltrate, so the rate of water flow and the rate of erosion increase. . . ." *Id.* ¶ 114.

Based upon a review of the above cited evidence and other evidence cited by the Board, the Court concludes that the Board's finding that Atkinson "exacerbated its difficulties by failing to take protective measures to drawdown the water prior to excavating the problem areas in dispute" is supported by substantial evidence, and is not arbitrary, capricious, or erroneous as a matter law. *Cf. Marley v. United States*, 191 Ct.Cl. 205, 423 F.2d 324, 329 (1970) (substantial evidence supported Board's finding that federal contractor's default had its roots in incompetence). The Board summarized that "[t]he cost of investigating, installing additional wells and delays to the tunnel excavation apparently dictated against more prudent action by [Atkinson]." Board Opinion at 93. The Board then found that Atkinson was not due compensation under the additional wells agreement, for it "had breached its part of any bargain" "by failing to take protective measures to drawdown the water prior to excavating the problem areas in dispute." *Id.* at 96.

As with its differing site conditions claim, Plaintiff's argument that it had "no notice or an opportunity to present pertinent evidence" on the issue of its failure to drawdown the water is unconvincing. Pl.'s Mot. for Summ. J. at 30. Atkinson's actions bore directly on assessment of Atkinson's theory for the water's source, were extensively briefed at trial before the Board, including by Atkinson's own expert, and figured prominently in Atkinson's own arguments attempting to shift blame onto WMATA for the dewatering problems. Compl. ¶ 165 (Atkinson's expert Dr. James Mahar: "The sinkholes did not pass through any known permeable water-bearing formations. . . . Moreover the second sinkhole was located approximately 200 ft. from the Sp-Sm sand in the T-3 unit at approximate Station 548 . . . . The ground losses and chimneying did not

disturb the soils encountered in the Inbound tunnel and the P-2 (SP-SM) sand in the channel on the right side of the Inbound tunnel."). Given the context, and meaning of the Board's negligence language, the Board's statements about negligence do not constitute an affirmative defense that WMATA somehow failed to plead. In light of the significant role Atkinson's imprudent or ill-advised actions played during the course of depositions before trial and at trial before the Board, detailed above, the Court cannot agree with Plaintiff's argument that it had "no notice or an opportunity to present pertinent evidence" on the "negligence" issue. The record conclusively demonstrates that Plaintiff had more than adequate opportunity to present, and in fact did present, evidence on the "negligence" issue. *See Conley v. Gibson*, 355 U.S. 41, 47, 78 S.Ct. 99, 2 L.Ed.2d 80 (1957) (purpose of pleading requirements is to give fair notice of the grounds upon which a claim or defense rests).

In short, because the Board supported with substantial evidence (1) its interpretation of the additional wells agreement, and (2) its finding of Atkinson's failure to fulfill a precondition to receiving compensation under the agreement – complying with Contract requirements in operating its dewatering program – the Court declines to overturn the Board's decision denying Plaintiff's claim for compensation under the additional wells agreement.

C. Plaintiff's Claim of Defective Dewatering Specifications

Finally, Plaintiff claims that "The Board's failure to find defective specifications when in fact they were defective constitutes a breach of contract which has caused Atkinson damages." Compl. ¶ 258. The Court shall deny this claim for two reasons. First, to the extent that Plaintiff's claim of defective dewatering specifications simply serves as another avenue for Plaintiff to contest the Board's denial of Plaintiff's differing site conditions claim, that claim was resolved above. Second, to the extent Plaintiff's claim asserts a legal claim for defective specifications, the Board's

denial of that claim is not legally erroneous, because the Board applied appropriate legal standards and supported its decision by substantial evidence showing that Atkinson "never seriously planned, expected or attempted to satisfy [the drawdown] requirement throughout the problem areas to be excavated." Board Opinion at 95.

First, the Court shall deny Plaintiff's defective dewatering specifications claim to the extent that it appears to be merely another argument contesting the Board's denial of Atkinson's differing site conditions claim. Atkinson utilizes its defective specifications claim primarily as a defense against a finding of its negligence. For instance, Atkinson argues that "the Board underpins its denial of the defective specification and differing site conditions on Atkinson's failure to achieve the specified one foot drawdown requirement." Pl.'s Mot. for Summ. J. at 35-36; *see also id.* at 47 ("the Board [in *Peterson Construction Co., Inc.*] held that [a risk-shifting performance] requirement should not override a Differing Site Conditions clause"). Plaintiff also cites to cases employing a defective specifications claim as a defense, but not to cases in which a defective specifications claim provides an affirmative basis for recovery. Plaintiff primarily relies on two such cases. *See* Pl.'s Mot. for Summ. J. at 44-46 (discussing *United Tech. Corp., Sikorsky Aircraft Div. v. United States*, 27 Fed. Cl. 393, 397 (1992) (wherein defendant used defective specifications claim as defense against government claim of design defect); and *Southwest Welding & Mfg. Co. v. United States*, 413 F.2d 1167, 1183 (1969) (wherein defendant successfully resisted the government's attempt to enforce contract specification requirements by means more stringent than tests provided for in the contract)). Employment of its defective specifications claim as a defense is consistent with Atkinson's presentation of the claim, and with the Board's treatment of it. *See supra*, Pl.'s Mot. for Summ. J. at 35-36, 47; Compl. ¶ 262 (claiming "damages in the sum of $5,821,544.51 . . . for the differing site condition claim, and . . . additional dewatering wells claim,"

but *not* for a defective specifications claim); *see also* Board Opinion at 81 ("the pre-briefing record contains detailed evidence and contentions relating to alleged defective specifications . . . . [Atkinson], however, has not sought redress under that clause. Instead, it has . . . merged the "defective specification" issues into its differing site conditions analysis.").

Second, to the extent Atkinson asserts a legal claim for defective specifications,[8] the Board supported its denial of that claim with substantial evidence showing that Atkinson "never seriously planned, expected or attempted to satisfy [the drawdown] requirement throughout the problem areas to be excavated." Board Opinion at 95. Government contracts commonly include "defective specifications" clauses. Defective specifications clauses provide that the contractor is entitled to an equitable adjustment for "any increased cost reasonably incurred by the Contractor in attempting to comply with" "defective specifications for which the [government] is responsible." *R.A. Weaver & Assocs., Inc. v. Asphalt Constr., Inc.*, 587 F.2d 1315, 1317 n. 1 (D.C. Cir. 1978); *Mergentime Corp. v. Wash. Metro. Area Transit Auth.*, Civ. A No. 89-1055 (GHR), 1993 WL 328083, at *4 (D.D.C. July 30, 1993).

In this case, Atkinson argued before the Board that "the one foot drawdown requirement was commercially impracticable to perform given the conditions actually encountered." Board Opinion at 95. Under contracts law, adjudicative tribunals "consider several factors in evaluating a claim of commercial impossibility" or impracticability, including: "(1) whether any other contractor was able to comply with the specifications," and "(2) the extent of the contractor's efforts in meeting the specifications." *Evan Johnson & Sons Constr., Inc. v. State*, 877 So.2d 360, 366 (Miss. 2004)

[8] Plaintiff fails to so much as ever cite the contractual provision on which it rests its defective specifications claim. Plaintiff also utterly neglects to expound upon its specific allegation that "The Board's failure to find defective specifications when in fact they were defective constitutes a breach of contract which has caused Atkinson damages." Compl. ¶ 258.

(citing *Foster Wheeler Corp. v. United States*, 206 Ct.Cl. 533, 546-47, 513 F.2d 588, 595 (1975) and *Oak Adec, Inc. v. United States*, 24 Cl.Ct. 502, 504 (1991)). Courts weigh these two factors to establish an "objective standard to prevent an incompetent or negligent contractor from recovering by simply alleging that it (subjectively) could not perform the work." *Id.* (quoting *Oak Adec*, 24 Cl.Ct. at 505-06). Further, "[t]here can be little sympathy for contractors who seek refuge behind the label of commercial senselessness (impracticability) without proof that they have made an effort to obtain performance in an alternative fashion." *Oak Adec*, 24 Cl.Ct. at 505-506 (citing *Jennie-O Foods, Inc. v. United States*, 217 Ct.Cl. 314, 328, 580 F.2d 400, 409 (1978)). "Whether performance of a particular contract" is commercially impracticable is a question of fact. *Conner Bros. Constr. Co., Inc. v. United States*, 65 Fed.Cl. 657, 687 (2005) (citing *Jennie-O Foods*, 580 F.2d at 409).

The Board properly applied these standards to deny Atkinson's claim of defective specifications based on commercial impracticability. The Board found that "[w]hether the drawdown requirement was commercially practicable is an academic issue in this case" because "the record fails to establish that the contract drawdown could not have been met if Atkinson had employed greater resources and other techniques available to it. . . . [Atkinson's] actual level of effort to meet the requirement wholly fails to reach that necessary to establish commercial impracticability." Board Opinion at 95. In addition, the Board noted that "[e]ven without additional wells, [Atkinson] did meet the requirement in some areas," and that "the record fails to establish that the contract drawdown could not have been met if Atkinson had employed greater resources and other techniques available to it. Moretrench's prebid NATM quote indicates that the drawdown could have been achieved for an additional $350,000." *Id.* As such, the Board properly weighed "the extent of the contractor's efforts in meeting the specifications," and whether the

requirements could be met in evaluating Atkinson's claim. *Evan Johnson & Sons*, 877 So.2d at 366.

As discussed *supra*, Section III(B), the Board supported its conclusion that Atkinson failed to make a serious effort to dewater with extensive factual findings. In particular, the Board found that Atkinson knew the water reading in piezometer CP-N2 near Station 545 "was high" and although "concerned about the readings in CP-N2," Atkinson decided not to take any specific action. Board Opinion ¶ 104 (quoting A-226 at 42-3; Appellant's Response to RPF 197). Instead, Atkinson decided to simply "carry on because we had just passed CP-N1 piezometer under exactly the same circumstances, and when we passed CP-N1, we didn't have a problem until later." *Id.* Furthermore,

> [t]ests performed by Moretrench indicated that the specified drawdown level had not been achieved. (Tr. 572-573). *Atkinson nevertheless elected to continue tunneling into the area with knowledge that there was water still in the soil near the crown of the tunnel. Moretrench was unable to determine if additional wells were necessary prior to reaching Sta. 538 because there was such a limited time between initial operation of those wells and the arrival of the shield* [on or about February 7, 1990]. . . . There were no discussions with Mr. Donohoe on the advisability of adding wells.

Board Opinion ¶ 127 (emphasis added). The gravamen of the Board's treatment of Atkinson's defective specifications claim is this: the evidence shows that Atkinson failed to meet the drawdown requirement, and failed to make serious efforts to meet it. As a result, the Board properly refused to speculate about whether the drawdown requirement was in fact achievable. This straightforward application of the objective standard for determining commercial impracticability shall survive Plaintiff's contention that "the Board underpins its denial of the defective specifications and differing site conditions on Atkinson's failure to achieve the specified one foot drawdown requirement." Pl.'s Mot. for Summ. J. at 35-36. Lastly, because the question of impracticability is one of fact, the

Board's conclusion deserves deference upon review by this Court. *See Titan Pac. Constr.*, 17 Cl.Ct. at 634. For the foregoing reasons, the Court shall deny Plaintiff's claim that the Board's decision denying Plaintiff's defective specifications claim was erroneous as a matter of law.

In sum, the Court shall deny Plaintiff's defective specification claim because: (1) to the extent that Atkinson's "claim" of defective dewatering specifications simply serves as another avenue for Atkinson to contest the Board's findings as to the reasonableness of its conduct and the denial of Atkinson's DSC claim, those claims were resolved in the Court's treatment of Atkinson's DSC claim; and (2) to the extent Plaintiff asserts a legal claim for defective specifications, the Board's denial of that claim is not legally erroneous, because the Board applied appropriate legal standards and supported its decision by substantial evidence showing that Atkinson "never seriously planned, expected or attempted to satisfy [the drawdown] requirement throughout the problem areas to be excavated." Board Opinion at 95.

IV: CONCLUSION

For the reasons set forth above, the Court declines to overturn the Board's decision denying Atkinson's differing site conditions, additional wells agreement, and defective specifications claims. As such, the Court denies Atkinson's Motion for Summary Judgment and grants WMATA's Cross-Motion for Summary Judgment. An appropriate Order accompanies this Memorandum Opinion.

Date: August 1, 2006

/s/
COLLEEN KOLLAR-KOTELLY
United States District Judge