UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF SOUTH CAROLINA
FLORENCE DIVISION

SUNLAND CONSTRUCTION COMPANY, INC.; Plaintiff; v. THE CITY OF MYRTLE BEACH; WILBUR SMITH, INC.; Defendants;	Civil Action No.: 4:05-cv-1227-RBH **FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER**
THE CITY OF MYRTLE BEACH; Cross-claimant; v. WILBUR SMITH, INC.; COASTAL SCIENCE AND ENGINEERING, INC.; Cross-Defendants;	
THE CITY OF MYRTLE BEACH; Third Party Plaintiff; v. HARTFORD FIRE INSURANCE COMPANY; Third Party Defendant.	

This matter is before the court following a bench trial held on November 5-9, 2007, and November 13-15, 2007. Having considered the testimony of the witnesses, both in-court

and by way of deposition, the exhibits, and arguments of counsel, the court issues the following Findings of Fact and Conclusions of Law pursuant to Rule 52 of the Federal Rules of Civil Procedure. To the extent that any findings of fact constitute conclusions of law, or vice-versa, they shall be so regarded.

Introduction

This construction lawsuit arose from the unsuccessful attempt by Sunland Construction Company, Inc. ("Sunland") to dig three tunnels and pull stormwater drainage pipes beneath the floor of the Atlantic Ocean in the Deephead Swash area in Myrtle Beach, South Carolina. The City of Myrtle Beach ("the City") contracted with Sunland for the project. Wilbur Smith Associates, Inc. ("Wilbur Smith") was the engineer hired by the City. Sunland blames its lack of success on Wilbur Smith's negligence and alleges that site conditions at Deephead Swash made its work impossible or economically impractical. Sunland also claims that the City and Wilbur Smith breached the warranty of the sufficiency of the plans.

Wilbur Smith denies negligence and claims Sunland assumed the risk for site conditions in its contract. Wilbur Smith contends that Sunland failed to successfully complete the construction work because Sunland was not properly equipped to do the work and Sunland did not possess the technical skill or personnel needed to properly complete the work.

The other parties in this lawsuit are Coastal Science and Engineering, Inc. ("Coastal Science") and Hartford Fire Insurance Company ("Hartford"). Coastal Science was the marine engineering firm hired by Wilbur Smith to handle the marine construction part of the project. Hartford issued the performance bond for Sunland on the project.

Coastal Science was originally named as a defendant by Sunland but Sunland dropped

its claims against Coastal Science after it discovered that Coastal Science did not prepare the geotechnical soils report and that Wilbur Smith terminated Coastal Science before Sunland's bid was received.

Sunland and the City have made claims against each other for breach of contract. The City has also made claims against Wilbur Smith for breach of its consulting agreement with the City and indemnification; for negligent misrepresentation; and for committing professional negligence in recommending Sunland's bid. The City contends Wilbur Smith should have recommended Misener Marine Construction, Inc.'s initial bid, which proposed using a trench method of construction. The City also has made a claim on the performance bond provided by Hartford for Sunland. As demonstrated by Misener's success after Sunland's failure, Wilbur Smith's failure to recommend Misener's bid in the initial bid round cost the City $459,769 in additional construction costs to complete the project. Further, the City has incurred substantial costs in litigating the present lawsuit.

Procedural History/Summary of Claims

Sunland filed this action on April 26, 2005, alleging causes of action against the City, Wilbur Smith, Coastal Science, and Thomas E. White, P.E. ("White"). On May 16, 2006, Sunland consented to the dismissal of its claims against Coastal Science and White. Sunland proceeded to trial with causes of action for: 1) breach of the warranty of the sufficiency of plans for installation of the storm water drainage pipes against the City and Wilbur Smith; 2) breach of contract against the City; and 3) negligence against Wilbur Smith.

On May 5, 2005, the City filed an Answer, Cross-claim, and Counterclaim alleging causes of action against Sunland, Wilbur Smith, Coastal Science, and White. On October 18,

2005, the City filed an Amended Answer, Cross-claim, and Counter-claim to add an additional claim against Wilbur Smith, Coastal Science, and White and a third-party claim against Hartford. On February 5, 2007, the City consented to the dismissal of its claims against White. The City's claims consist of a: 1) counterclaim for breach of contract against Sunland; 2) cross-claim for negligence against Wilbur Smith and Coastal Science; 3) cross-claim for negligent misrepresentation against Wilbur Smith and Coastal Science; 4) cross-claim for equitable indemnification and/or indemnification by contract against Wilbur Smith; and 5) third-party claim against Hartford to recover on the performance bond provided by Hartford for Sunland.

On May 31, 2005, Wilbur Smith filed an Answer and Cross-claim against Coastal Science. Wilbur Smith's claim against Coastal Science is a claim for indemnification based on allegations of breach of an implied warranty, breach of good faith and fair dealing, breach of duty of impartial and competent engineering judgment, and/or negligence.

FINDINGS OF FACT

The Parties

1. Plaintiff Sunland Construction Company, Inc. is a corporation organized and existing under the laws of the State of Louisiana with its principal place of business in the State of Louisiana.

2. Defendant City of Myrtle Beach, South Carolina is a municipality organized and existing under the laws of the State of South Carolina.

3. Defendant Wilbur Smith, Inc., correctly known as Wilbur Smith Associates, Inc., is a

corporation organized and existing under the laws of the State of Delaware, with its principal place of business in the State of South Carolina.

4. Defendant Coastal Science & Engineering, LLC is an entity organized and existing under the laws of the State of South Carolina, with its principal place of business in the State of South Carolina.

5. Third-Party Defendant Hartford Fire Insurance Company is a corporation organized and existing under the laws of the State of Connecticut and is doing business in South Carolina through the issuance of a performance bond for Plaintiff Sunland on the project that is the subject of this lawsuit.

The Project

6. The City contracted with Wilbur Smith on May 1, 1996, for Wilbur Smith to provide engineering services for various municipal projects. Wilbur Smith agreed to provide the City with professional planning, engineering consultation and advice and related services for all phases of the projects it undertook. The scope of work for each project was to be set forth in future supplemental agreements. In addition, Wilbur Smith agreed to indemnify and hold the City harmless from and against any and all losses and/or damages relating to claims resulting from the breach of any covenant by Wilbur Smith or negligence or willful misconduct of Wilbur Smith or any of its employees in the performance of the agreement. [JTE 1].[1]

7. Pursuant to the Master Agreement for Engineering Services, Wilbur Smith prepared a storm water master plan for the City. The storm water master plan recommended relocation

[1] The parties submitted Joint Trial Exhibits 1-160 ("JTE__"), which the court will refer to throughout its findings.

and enlargement of the storm water outfall in the Deep Head Swash area of the City, which is an approximately 400 acre watershed that discharges storm water directly onto the beach. The enlargement of the storm water outfall was for increased runoff and the relocation of the pipe was to eliminate water contamination at the shoreline, which was caused by direct discharge onto the beach from the existing pipe. [JTE 1].

8. Wilbur Smith entered into a supplemental agreement with the City dated February 20, 2004 to prepare the design for the Deep Head Swash Ocean Outfall Project (the "project"). The scope of the project was the enlargement and relocation of storm water discharge pipes so that storm water would be carried under the beach and discharged underwater at a point approximately 1,000 feet offshore. The project was divided into two phases. Phase I included installation of inland drainage pipes and related work. Phase II included installation of the offshore drainage pipes and related work. [JTE 1 and 7]. This lawsuit focuses on Phase II of the project.

9. Wilbur Smith did not have the necessary experience or knowledge to design the offshore portion of the project. [Gambill Tr., at 3, Docket Entry #210]. To compensate for its lack of experience in marine construction design work, Wilbur Smith assembled a team of professionals who worked under subcontracts with Wilbur Smith. Wilbur Smith's design team consisted of Coastal Science, Flow Science, Athena Technologies, Inc. ("Athena"), and Mid-Atlantic Drilling. Coastal Science was retained by Wilbur Smith as the offshore specialist. Wilbur Smith represented to the City that the Wilbur Smith team would do the necessary investigations, assist with permitting, prepare the documents and support needed for bidding, advertise the project and evaluate the bids for recommendation of the award. [JTE 1].

10. Coastal Science specializes in coastal engineering, seafloor erosion, storm water management in coastal zones, wastewater treatment, sediment management, dredging, and coastal protection. [Forman Tr., at 71, Docket Entry #212]. Wilbur Smith retained Coastal Science to investigate, design, and administer the construction of the sub-seafloor pipeline. [Gambill Tr., at 112, 115-16, Docket Entry #209; JTE 4].

Two proposed methods for installation of pipes

11. The City had constructed two ocean outfall projects prior to this project. The prior projects were constructed by the "trench" or "open cut" method. [Hancock Tr., at 126-27, Docket Entry #211]. In the trench method, the drainage pipes are placed by digging a trench and placing the pipe in the trench. The contractor uses steel sheet piling to protect the open trench until the pipe is placed. [JTE 7].

12. In an effort to reduce the project's cost and to minimize disruption to the beach, Coastal Science recommended consideration of horizontal directional drilling ("HDD") as an alternative method of installing the underground pipelines. [JTE 7].

13. The HDD method involves drilling an underground hole and then pulling the drainage pipe through the hole. The underground hole is created by drilling a pilot hole along a path established by the engineer through the design documents. After the pilot hole is completed, the pilot hole is enlarged to the desired diameter by using a series of progressively larger hole cutters or cutting assemblies. During drilling, drilling mud is constantly pumped into the hole under pressure in order to support the walls of the hole against collapse and filter debris created by the drilling process out of the hole. Once the hole reaches the required diameter, the drainage pipe is then pulled through the hole. [JTE 7].

14. As part of its services, Coastal Science prepared an Engineering Design Report. [JTE 7]. To assist in the preparation of the design report, Coastal Science retained the services of John Hair, P.E., a recognized expert in HDD, as a consultant regarding the use of HDD. [Forman Tr., at 82, Docket Entry #212].

15. Because Coastal Science was not confident that HDD contractors would bid competitively for this project, Wilbur Smith obtained construction permits using both the trench method and the HDD method. [JTE 27].

16. The design report submitted to the City by Wilbur Smith in July 2004 provided the alternate designs of trench method and HDD for the offshore work and an estimate for each design. Both designs and cost estimates were prepared by Coastal Science. [JTE 7]. The HDD design provided for three 48 inch HDPE pipes of 1,000 linear feet at an estimated cost of $3.8 million, which was later increased to $4.4 million. The trench design provided for two 60 inch reinforced concrete pipes of 1,000 linear feet at an estimated cost of $5.6 million. The design report indicated that the HDD method would likely cause less disruption in the beach area and the ocean floor. [JTE 7].

Geotechnical Report

17. Accurate geotechnical information is critical to the design and performance of an HDD project. Soil conditions are a major factor affecting the feasibility and cost of using HDD. The potential for problems to occur increases with the presence of gravel, boulders or cobbles or with transitions from non-lithofied material into solid rock. [Lingo Tr., at 223-26, Docket Entry #210]. An HDD project takes place almost exclusively underground, and an important consideration is the composition of the subsurface material through which the hole will be

drilled and the pipe pulled. The design parameters, and the cost of an HDD project, are directly determined by the subsurface conditions. The subsurface conditions must be such that the hole can be maintained in a clean and open condition to allow successive cuts and to allow the pipe to be pulled when the hole is the proper size. Soil conditions that will not stay consolidated (such as gravel) will not maintain the integrity of the walls of the hole.

18. Subsurface conditions that affect the feasibility, as well as the cost of HDD, are the presence of flowing water under pressure, and rocks denominated as gravel (three inches or smaller), cobbles (three to twelve inches) and boulders (larger than twelve inches).[2] [Hair Tr., at 33, Docket Entry #209; Skonberg Tr., at 43, Docket Entry #209]. Generally, drilling mud, no matter how well composed, cannot support gravel, cobbles, and boulders from falling or collapsing into the drill path. Boulders collapsing into the drill path may prevent the passage of the cutter heads on successive passes and may also cause the drill pipe to become lodged in the hole if the pipe is pulled when cobbles and boulders are in the hole.

19. The presence of flowing water causes difficulty with, or will prevent, an HDD project when the water flowing beneath the surface in the area of the drill path has sufficient pressure to overcome the resistance of the drilling mud. If this occurs, the mud will not maintain sufficient thickness or viscosity to maintain the walls of the hole and will flow excessively out of the hole. Such problems can lead to deterioration and collapse of the hole.

20. Wilbur Smith performed a geotechnical investigation and produced a Geotechnical

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[2] *See* ASTM Standard D2487-98, Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System) (2001) cited in Bruner & O'Connor On Construction Law § 14:2 (2002).

Report, dated August 11, 2004 (the "Geotechnical Report") to be used by Coastal Science to evaluate the feasibility of HDD and to form the basis of its design. The Geotechnical Report provided information on such matters as (1) site and geologic conditions; (2) subsurface exploration; (3) subsurface conditions, based on soil borings that were obtained; (4) generalized stratigraphy; and (5) excavation stability. [JTE 11]. The Geotechnical Report was incorporated into the contract specifications and was signed by Kevin Dickey, Project Geologist and sealed by E. Woody Lingo, P.E., Principal Geotechnical Engineer, and by Wilbur Smith as an engineering firm.

21. The Geotechnical Report and the findings and conclusions by Wilbur Smith were based on five soil borings made near the three proposed drill paths. Two soil borings were made through the beach and three were made through the seafloor. [JTE 11]. The number of borings, the depth of borings, and the information provided in the borings were adequate and reasonable for the proposed HDD project. [Skonberg Tr., at 151-52, Docket Entry #208; Hair Tr., at 13, Docket Entry #209].

22. A summary of Wilbur Smith's findings related to the soil borings is found at pages 5 and 6 of the Geotechnical Report. [JTE 11]. Further analysis of each soil boring can be found in the subsurface profile provided at Appendix B of the Geotechnical Report. [JTE 11]. Notably, the Geotechnical Report indicates that:

> All three ocean borings exhibited alternating layers of SILTY SAND (SM) soils and cemented hard limestone layers that were typically about one foot thick, but were found in boring OF-2 to be up to 2 ½ to 4 ½ feet thick. . . These alternating cemented sand and/or limestone layers extend to elevations that vary from about -53 feet in boring OF-1 to -69 feet in boring OF-3, which was the termination depth of this boring.

[JTE 11].

23. Additionally, the Geotechnical Report noted several issues that justified special consideration, including the cemented layers observed in the soil borings. The report stated that:

> The cemented layers, which are interbedded with fine sandy soils, may present some difficulty in achieving penetration using either the HDD process, or by conventional clamshell or dragline excavation means. The angle of penetration that an HDD drill strikes the hard cemented layers could cause it to tend to "walk" across the surface rather than allow penetration. It is recommended that potential Contractors confirm that the relatively level bedded cemented layers can be readily penetrated using the planned equipment.

[JTE 11].

24. The subsurface profile contained at Appendix B of the Geotechnical Report shows the estimated stratification of the project site and, importantly, provides the warning that "[i]nterpretations provided are based on the intervals sampled at the time of drilling. *Actual conditions between sampling intervals may differ as a result of gradual or abrupt changes*." [JTE 11] (emphasis added).

25. Sunland claims the Geotechnical Report was misleading or erroneous because the hard cemented sand/limestone in the soils was described as "relatively level bedded cemented layers." Based on that description and other similar descriptions in Wilbur Smith's Geotechnical Report, Sunland concluded the cemented sand/limestone was a flat, "continuous" cemented layer like the surface of a concrete driveway.

26. Wilbur Smith contends that the Geotechnical Report only described the site conditions

at the location of each boring. Wilbur Smith contends it did not make any representations about what existed between the soil borings. The determination of what conditions existed between the soil borings was the responsibility of the party making those assumptions. Wilbur Smith takes the position that Sunland misinterpreted the Geotechnical Report and made incorrect and unreasonable assumptions regarding what conditions existed between the soil borings.

27. The Geotechnical Report prepared by Wilbur Smith did not mention fresh water aquifers and did not specifically identify boulders in the area specified for construction of the outfall pipelines.

28. Zane Abernathy, P.E., an expert witness for Wilbur Smith, who has more than twenty-eight years of experience in the geotechnical engineering field, testified that he has reviewed "thousands" of geotechnical reports during his career, including four related to outfall projects in the Myrtle Beach area. [Abernathy Tr., at 2-7, 9, Docket Entry #211]. Abernathy opined that the Wilbur Smith Geotechnical Report was by far the most thorough that he had reviewed because it was the only report that provided offshore borings.[3] He found the Wilbur Smith Geotechnical Report to be superior to what he had seen with regard to other geotechnical reports in the Myrtle Beach area. He also opined that the Wilbur Smith report met the standard of care required of a geotechnical engineer. *Id*. at 9-10.

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[3] While Abernathy may have limited HDD experience, he is clearly qualified as a geotechnical engineer to testify as to the appropriate standard of care required of geotechnical engineers in the preparation of geotechnical reports. Abernathy is also qualified to render an expert opinion regarding his interpretation of the Wilbur Smith Geotechnical Report and what subsurface conditions should be reasonably anticipated from the data reflected in the Geotechnical Report. The court finds Abernathy's testimony to be credible.

29. Based on his interpretation of the Geotechnical Report, Abernathy concluded that the soil borings indicated that someone might expect to hit hard layers of materials at each location shown in the soils report, but that these hard layers are at different depths and different locations. He also concluded that these layers varied in thickness. *Id*. at 19-20.

30. Abernathy was of the opinion that nothing he had seen about the conditions encountered by Sunland on this project were materially different than what was represented in the Wilbur Smith Geotechnical Report. *Id*. at 31, 58. The conclusion to be drawn from his testimony was that there were no differing site conditions and no material discrepancy between the Geotechnical Report and the physical conditions of the work site.

31. John Hair, the HDD expert retained by Coastal Science to provide HDD consultation services and later retained by Sunland to provide engineering assistance, was requested by Sunland to review the Geotechnical Report to determine whether the report indicated the presence of boulders and fresh water aquifers.[4] [JTE 94]. After reviewing the report, Hair found:

> The report does not specifically call out the possibility of boulder deposits and generally indicates that soils encountered beneath the beach will consist of sands, silts and some peat. However, the report does note the presence of cemented sand layers that could not be penetrated by a standard penetration test. Indurated material from these layers may form the boulders encountered by Sunland. . .The geotechnical report addresses ground water levels but makes no specific comment on groundwater flow. However, in my experience it is unlikely that a standard subsurface exploration program would detect

[4] Sunland contracted with John Hair on November 2, 2004 to provide engineering assistance for the project on an as needed basis. [JTE 77]. Sunland utilized Hair's services for calculation of pulling loads in November 2004 and did not contact Hair again until March 2005 when Sunland requested Hair to comment on the difficulties Sunland was experiencing on the project. The fact that Sunland themselves retained Hair's services during this project bolsters Hair's credibility in the court's view. The court finds Hair's testimony to be credible.

> the problematic flowing groundwater conditions described by Mr. Daigle. Flowing groundwater can, and does, cause problems on horizontal directional drilling projects. Normally these problems occur where there is significant elevation difference between the entry and exit points and perched aquifers are encountered. I would not have anticipated such an occurrence on the Deep Head Swash Stormwater Outfall Project.

[JTE 94].

32. At trial, Mr. Hair testified that the Geotechnical Report was typical of the geotechnical data prepared for an HDD design and construction. [Hair Tr., at 13, Docket Entry #209]. Mr. Hair further testified that the geotechnical data complied with industry standards and was sufficient for the design and construction of an HDD project. *Id*. at 14. Although the Geotechnical Report did not specifically reference the presence of boulders, Mr. Hair testified that Sunland should have anticipated the presence of boulders by what was reflected in the geotechnical data. *Id*. at 26. According to Hair, there can be varying conditions between the soil borings and the thickness and depths of the hard layers could vary between the borings and the cemented layers could break up into boulders. *Id*. at 28-30.

33. The court finds by a preponderance of the evidence that Wilbur Smith met the standard of care required of a geotechnical engineer in its preparation of the Geotechnical Report. The subsurface information revealed by the soil borings was accurately and fully disclosed in the Geotechnical Report. The court further finds by a preponderance of the evidence that the Geotechnical Report was sufficient for the design and construction of this HDD project, and there was no defect in the plans and specifications.

Prequalification for Project

34. On August 13, 2004, Coastal Science sent a request for qualifications to Sunland, Mears HDD, LLC ("Mears"), and other HDD contractors requesting that they submit their qualifications for bidding on the Deep Head Swash outfall project. The Geotechnical Report prepared by Wilbur Smith was also sent to the prospective bidders. [JTE 11].

35. On September 30, 2004, Coastal Science notified Sunland, Mears, and the other HDD contractors that they were pre-qualified to bid on the project. While Sunland had less experience than some of the other HDD contractors, it had adequate experience, financial assets and the necessary equipment to perform this project and was properly qualified by Coastal Science. [JTE 54, 61, 63]. Coastal Science's prequalification report on Sunland gave Sunland a "medium" recommendation and stated: "Smaller Company, Experienced, VA Beach Project, good financials." [JTE 61].

Bidding Process

36. On or about October 1, 2004, the City issued invitations for bids to the pre-qualified bidders for the outfall project. The bid documents contained the plans and specifications, contract documents, and the geotechnical report previously sent to the bidders by Coastal Science. The bid documents were prepared by Wilbur Smith. [JTE 11; Moore Tr., at 202, Docket Entry #211].

37. A mandatory prebid conference was held on October 14, 2004. [JTE 65]. The question was raised at the pre-bid conference as to whether the contractor would be required to take soil samples before bidding. [JTE 65]. Addendum I to the Contract Documents was issued as a result of this meeting, which advised bidders that it was their responsibility to take additional

soil borings if they deemed it necessary. [JTE 11]. No bidder, however, took additional borings or soil samples before submitting a bid.

Contract Documents

38. The bid documents eventually became the contract documents between the City and Sunland. [JTE 11]. Those documents contained numerous clauses which placed the responsibility on the contractor to investigate the site conditions and obtain such additional information they deemed necessary to make informed bids on the project. The contract also indicated that if the contractor chose to use the HDD method, the contract would be a lump sum contract under which the contractor would not be paid unless it successfully completed pullback of a storm drainage pipe. The contract provided HDD would be conditioned on a "no hole, no pay basis." [JTE 11]. Section 0650, paragraph 1.09, of the contract documents provides the following:

> DIRECTIONAL DRILLING PAYMENT: Payment for directional drilling shall be on the basis of "no hole no pay." Payment shall be made to the Contractor for completed pipeline installation including mobilization, pilot hole drilling, reaming, and successful pipe installation. No partial payments will be made. Payment will be made for each completed pipeline. Project Mobilization will be paid following completion and approval of first pipeline installation.

39. The contract attempted to disclaim any implied warranties for subsurface conditions by stating that the City and Wilbur Smith made no warranties as to the completeness or correctness of the information contained in Wilbur Smith's Geotechnical Report and the Contractor was to use his own judgment in evaluating the nature of subsurface conditions. [JTE 11]. Section 2210 of the Specifications states the following:

> 1.1 SUBSURFACE INVESTIGATION: Subsurface investigations were made for this project at the project site. The Owner and Engineer make no warranties as to the completeness or correctness of the information contained herein and the Contractor shall use his own judgment in evaluating the nature of the subsurface conditions.
>
> 1.2 The report prepared by Wilbur Smith Associates, dated August 11, 2004, entitled "Report of Geotechnical Investigation, Phase II," is attached to this specification.

[JTE 11].

40. The contract documents also stated the following with regard to the geotechnical data: "The following Soil Report is included in the Bid Documents: 'Report geotechnical investigation, Phase II' (10 pp.+ appendix), dated August 11, 2004. It shall be the contractor's responsibility to confirm soil conditions and water table on the site by taking its own samples. This work shall be coordinated with the owner prior to bidding the project." [JTE 11].

41. The contract documents did not contain a "differing site condition" clause, which is typically used in construction contracts to shift the risks for unknown site conditions from a contractor to an owner. However, the contract documents contained an "errors and omissions" clause which required the contractor to notify the engineer in writing of any discrepancies between the contract documents and the physical conditions of the work site. [JTE 11]. The "errors and omissions" clause stated:

> If the Contractor, in the course of the work, finds any errors or omissions in the Contract Documents or in the layout as given by survey points and instructions, or if he finds any discrepancy between the Contract Documents and the physical conditions of the work site he shall *immediately* notify the Engineer, *in writing* for correction. *Any work done after such discovery, until authorized, will be done at the Contractor's risk.*

[JTE 11] (emphasis added).

42. James Daigle of Sunland testified that when he submitted Sunland's bid, he knew that the contract documents intended to shift the risk of subsurface conditions from the owner to the contractor. [Daigle Tr. at 31, 134 Docket Entry #208]. However, Mr. Daigle testified that he believed that in the event adverse subsurface conditions were encountered that were not reflected in the geotechnical data, the "errors and omissions" clause gave him the right to discuss those subsurface conditions with the owner and engineer and the engineer would assist in providing a solution to the problems. *Id*. at 160. The following exchange illustrates Mr. Daigle's position:

> Q. . . .You bid this job with the knowledge that the contract documents intended to shift the subsurface risk to the contractor, didn't you?
>
> A. That appeared to be the case, yes.
>
> Q. And you did not raise any questions when you submitted your bid to the owner about that issue, did you?
>
> A. No, I did not. I felt like the errors and omissions clause would take care of that.

Id. at 31.

> Q. You bid this job knowing the owner intended to shift the risk to you, didn't you?
>
> A. That's true. That's exactly true.

Id. at 134.

43. Daigle knew of the City's intent to shift the risk of subsurface conditions to the Contractor, but, in essence, Sunland believed that the "errors and omissions" clause referenced above would circumvent the City's clear intent and provide Sunland with a "parachute."

Sunland believed and contends in this lawsuit that the "errors and omissions" clause placed the risk of subsurface conditions on the City, functioning in the same way as a typical "differing site condition" clause.

44. Eric Skonberg, a witness for Wilbur Smith, who, like John Hair, has extensive experience in HDD, gave testimony regarding the distinction between "errors and omissions" clauses and "differing site condition" clauses. [Skonberg Tr., at 149-51, Docket Entry #208]. Mr. Skonberg testified that subsurface conditions are normally dealt with specifically in a "differing site condition" clause, while "errors and omissions" clauses relate to errors in the design specifications, such as the pipe material to be used. *Id*. at 150-51.

> Let's say that a pipe material was specified. That had certain diameter wall thickness and strength. And the design shows it's going to go this deep in the ground, and pull forces should be this or that, and that that pipeline failed while it was being installed. Through no fault of the contractor, he used the proper materials as specified. That would be an error in the design. And to me that's, that's what errors and omissions relate to, as opposed to differing site conditions.

Id.

45. The "no hole, no pay" clause and the lack of a "differing site condition" clause indicate a clear intent to shift the risk of adverse subsurface conditions to the contractor. Additionally, Section 2210 of the Specifications states unequivocally that "the Contractor shall use his own judgment in evaluating the nature of the subsurface conditions."

46. The genesis of the "no hole, no pay" clause as a means to shift the risk of subsurface conditions from the City to the contractor can be seen through the communications between John Hair and Coastal Science during the planning stages of the project. In an email dated August 30, 2004, from John Hair to Bill Forman of Coastal Science, Mr. Hair addressed

concerns raised by Coastal Science on behalf of the City. [JTE 59]. Coastal Science raised the question: "Is there the potential that the drilling contractor will show up at the site, attempt to drill and due to unfamiliar conditions, not be able to do the job by HDD?" John Hair responded:

> Yes. Because activities take place underground and out of site, HDD is [sic] presents a higher risk of contract claims and disputes than other forms of utility construction. Contractor skill is critical to success. These facts notwithstanding, we recommend that you bid this installation using a standard lump sum contract form. The contractor should only be paid for the work completed. This is referred to as a "no hole, no pay" contract in the HDD industry. This should be clearly spelled out in the contract and you should consider whether or not you need all three outfalls installed for the project to have any value.

[JTE 59]. Also, Coastal Science requested: "We need you to provide input on how the contract documents should be structured to distribute risk properly between the Contractor and the City, and in such a way as to get quality bids from contractors." Hair responded by referring to the use of the "no hole, no pay" clause and added, "[w]e cannot judge the City's tolerance for risk. However, we don't think this installation requires the City to take on any risk." [JTE 59].

47. The City intended to shift the risk of subsurface conditions to the contractor. Sunland understood that this was the City's intent, yet did not raise the issue with the City and chose to rely on its interpretation of the "errors and omissions" clause. Regardless of how the "errors and omissions" clause is construed, the subsurface information revealed in the soil borings was accurately and fully disclosed in the Geotechnical Report, the subsurface conditions encountered by Sunland were not materially different from the conditions reflected

in the Geotechnical Report, and there was no material discrepancy between the Geotechnical Report and the physical conditions of the work site. *See* Findings of Fact ¶¶ 33, 116-117. Therefore, even if the "errors and omissions" clause was construed as a "differing site condition" clause, as Sunland argues, the provision would not provide Sunland with relief. At the same time, however, the court is not satisfied that there was a meeting of the minds regarding the allocation of risks for site conditions. *See* Findings of Fact ¶ 53.

Submission of Bids

48. On October 21, 2004, prior to the date bids were due, Wilbur Smith, without any knowledge or consultation with the City, terminated all services of Coastal Science to save expenses. [JTE 67]. Coastal Science, with its paid consultant, John Hair, was the only Wilbur Smith team member with experience in HDD. Wilbur Smith, who did not have previous experience with HDD projects, did not inform the City that it had terminated Coastal Science.[5] [Gambill Tr., at 111, Docket Entry #210; Moore Tr., at 248, Docket Entry #211].

49. Sunland submitted a bid of $4,147,996 to install the pipe using the HDD method. The next lowest bid for installation of the pipe using HDD, although non-responsive, was from Mears in the amount of $13,880,000. A third bid for HDD was from Michels in the amount of $18,984,950.

50. Four bids were received for the "trench" or "open cut" method. These bids ranged from $4,467,000 to $8,185,000.

51. In summary, the bids received for the HDD and trench methods were as follows:

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[5] Apparently, the City did not become aware of Coastal Science's termination until this litigation ensued.

HDD

Sunland	$ 4,147,996
Mears (non-responsive bid)	$13,880,000
Michels	$18,984,950

TRENCH

Misener	$ 4,467,000
Cape Romain	$ 4,722,000
TIC	$ 4,712,934
Jay Cashman	$ 8,185,000

[JTE 15].

52. Sunland obtained an exclusive bid from The Industrial Company ("TIC") for the marine support work. The other HDD bidders were unable to obtain bids from marine support contractors before bid opening. [Daigle Tr., at 137, Docket Entry #207; Gambill Tr., at 140, Docket Entry #209; Hannon depo., at 17-19, Docket Entry #140-2]. Sunland's procurement of the exclusive bid from TIC, however, does not account for the vast disparity between the bids submitted by Sunland and the other HDD bidders.

53. Coastal Science's engineer, Bill Forman, testified that bids are often inflated when contractors realize they are expected to undertake the risks for unknown site conditions. [Forman Tr., at 106, Docket Entry #212]. James Daigle of Sunland testified he would have added a contingency to the bid if he believed Sunland was assuming the risk for unknown site conditions. [Daigle Tr., at 114-15, Docket Entry #208]. Sunland knew the City intended to shift the risk of subsurface conditions to the contractor; yet, Sunland submitted a bid that had no contingency for subsurface risks. *Id*. at 17-19, 114-115.

54. The City's procurement code allowed the City to reject any or all bids or to award the

bid to the lowest responsible bidder. Code of Ordinances, City of Myrtle Beach, South Carolina, Sec. 2-246; [Andrews Tr., at 10, Docket Entry #212]. The bid documents expressly stated that the lowest responsible bidder did not necessarily mean the lowest bid amount. [JTE 11].

55. The lowest bidder using the proven trench method was Misener who had successfully completed two similar storm drainage outfall projects in Myrtle Beach prior to the opening of bids. Misener had demonstrated the ability, capacity and skill to complete the project using the trench method.

56. The discrepancies in the HDD bid proposals raised a red flag of concern for the City. [Moore Tr., at 204, Docket Entry #211]. Steve Moore, of the City's Public Works Department, testified that when he became aware of the bid disparity, he contacted Pat Gambill of Wilbur Smith and inquired as to the reason for the difference in HDD bids. *Id*. at 204. Mr. Gambill represented that the he had spoken with the HDD bidders and was comfortable with the amount of Sunland's bid. *Id*. at 205. Mr. Moore testified as follows:

> Q. What did Mr. Gambill tell you?
>
> A. I can't tell you verbatim, but I think he had had conversation with either Mears, Michels or both and one of - - let's see if I can remember this accurately. It was Michels, I think, had no offshore support and therefore they were hesitant to put in a, I say a competitive bid, because they didn't know what the offshore support was going to be. Pat [Gambill] also said that Sunland did have an offshore support, they had TIC on the team, everything was set and ready to go, and he felt very comfortable with the bid.
>
> Q. Did you ask him about the differences, that had he gone over the differences with anybody?

A. I did.

Q. What did he tell you?

A. He, I don't know if he said he went over the differences, but he said he had talked with Sunland and he was comfortable with their number.

Q. Did he tell you he had talked to Mr. Daigle or someone at Sunland?

A. Yes, he did.

Q. After the bids had come in?

A. That's what he told me.

Q. You heard him testify differently here today?

A. I'm afraid I did.

Q. Now, if you had known that he simply was giving you the Sunland bid and had not investigated the bid, would you have recommended the Sunland bid at this point in time, with the discrepancies with Mears and Michels?

A. I don't think I could have.

Id. at 205-06.

57. Once the bids were submitted, Wilbur Smith had 60 days under the contract to evaluate the bids before the City was required to make a decision and notify the winning bidder. [Gambill Tr., at 113, Docket Entry #210]. Out of six HDD bidders who were pre-qualified for the project and sent bid packages, only two submitted legitimate, responsive bids - Sunland ($4,147,996) and Michels ($18,984,950). *Id*. at 118.

58. Wilbur Smith's project manager, Pat Gambill, testified with regard to Wilbur Smith's evaluation of the bid proposals and recommendation of the lowest responsible bidder. Mr.

Gambill testified that before recommending Sunland's bid to the City, Wilbur Smith tabulated the bids, determined the lowest bidder, and confirmed that all of the required documents were submitted. *Id*. at 113-14, 118.

59. The City expected Wilbur Smith's team to use their expertise to evaluate the bids and to make a proper bid recommendation. [Moore Tr., at 198, Docket Entry #211]. However, before the bids were submitted and evaluated, Wilbur Smith terminated the portion of their team, Coastal Science, that was experienced in HDD and concealed that fact from the City. *Id*. at 203, 248. Further, Wilbur Smith falsely represented to the City it had contacted Sunland and inquired about the bid discrepancy before the bid was awarded to Sunland. *Id*. at 205. Wilbur Smith did not contact Sunland, Mears, Michels, Coastal Science or Coastal Science's HDD consultant, John Hair, for an explanation of the discrepancies or for suggestions on how Sunland's bid could be investigated further. John Hair, Coastal Science's HDD consultant, testified in his deposition that if he had been aware of the cost disparity among the HDD bidders, his gut reaction would have been to recommend the trench or cut and cover method instead of HDD. [Hair depo., at 122-23, Docket Entry #171-2]. Contrary to its agreement with the City, Wilbur Smith did not evaluate the technical proposals of Sunland or compare Sunland's technical proposals with the technical proposals of the other HDD bidders. [Gambill Tr., at 114-19, Docket Entry #210].

60. Despite its lack of experience in HDD, and without any input from an HDD consultant, Wilbur Smith recommended the contract be awarded to Sunland. [JTE 17]. Wilbur Smith recommended Sunland's bid without reservation and did not disclose to the City that HDD or Sunland's bid would pose any risks for the City. [Gambill Tr., at 118-22, Docket Entry #210].

61. The court finds by a preponderance of the evidence that Wilbur Smith breached the standard of care of a similarly situated Professional Engineer by: 1) recommending that the contract be awarded to Sunland without first investigating the vast bid disparity among the HDD bids; and 2) undertaking to evaluate the HDD bids and recommend a lowest responsible bidder even though Wilbur Smith did not have the expertise or competence to evaluate HDD bids or make recommendations concerning the lowest responsible HDD bidder. Although Sunland was aware of the City's intent to shift the risk of adverse subsurface conditions to the contractor, through competitive zeal or simple oversight, Sunland failed to appreciate the risk of encountering adverse subsurface conditions and grossly underbid the project. Because of Wilbur Smith's inexperience with HDD and their failure to investigate the reason for Sunland's extremely low bid, Wilbur Smith negligently recommended to the City that the contract be awarded to Sunland. Wilbur Smith's negligence and breach of the standard of care proximately caused damages to the City. The court finds that the City has met its burden of proof on its negligence claim against Wilbur Smith.

62. Based on Wilbur Smith's recommendation, the City awarded Sunland the contract on November 1, 2004. [JTE 18]. This award was almost three weeks after Coastal Science was terminated by Wilbur Smith. Coastal Science had no role (1) in evaluating the bids; (2) in recommending the method of pipe installation based on the apparent disparity in the bids; or (3) in the decision to award the contract to Sunland. Sunland was aware of the large bid disparity but did not assert that its bid was a mistake. [Daigle Tr., at 32-33, Docket Entry #208].

63. The Contract was signed on November 12, 2004. A notice to proceed was issued that

same date with an effective date of November 15, 2004, with substantial completion to be within 200 calendar days of this date. This commencement date would allow Sunland to complete the drill paths that required the use of the offshore barge before the period of inclement weather and rough seas as warned by the information provided to prospective bidders. [JTE 54]. As required by the Contract, Sunland submitted payment and performance bonds issued by the Defendant Hartford. [Performance Bond, Docket Entry #30-2].

Contract Performance

64. Sunland's onsite mobilization was delayed, through no fault of its own, until January 4, 2005 because of the Phase I contractor's delay. This delay extended Sunland's offshore work into the period of rough seas predicted by the City in its prebid information. [JTE 79; Daigle Tr., at 138, Docket Entry #207; Oubre Tr., at 7, Docket Entry #206; Kubala depo., at 28, 33, Docket Entry #141-2].

Drilling Operations and Complications

65. Sunland used a specialist subcontractor, Horizontal Technologies ("HT") of Houston, Texas, to steer and drill the 10-inch pilot hole from the beach to the 25-foot deep exit pit approximately 1100 feet off shore along the profile required by the plans and specifications.

66. The as-built profile of the pilot hole varied from the as-planned profile set forth in the plans and specifications. The pilot hole exceeded the depth of the original designed profile, which was acknowledged by both Sunland and Wilbur Smith. [Oubre Tr., at 19, Docket Entry #206; Gambill Tr., at 89-90, Docket Entry #210].

67. Sunland submitted the as-built profile on January 15, 2005 and it was approved by Wilbur Smith in an e-mail on January 16, 2005.

68. From January 16th through January 24th, Sunland increased the hole size from 18 inches to 52 inches with relatively little trouble except for periodic equipment break downs which caused several days delay. Between January 16th and 24th, Sunland encountered hard materials during drilling but the hard materials encountered did not cause any significant problems or delays. [JTE 128].

69. On January 25, 2004, Sunland broke a drill pipe causing it to lose a 64 inch cutter head in the partially completed tunnel. A diver was summoned to assist in the retrieval of the cutter head. The diver noted a strong flow of water from the exit pit. He testified he could not tell whether the flow was from fresh water or salt water. The flow was noted again on January 26th but not on any other days. [JTE 128]. Sunland did not note the flow as a potential problem and did not notify Wilbur Smith or the City that the flow of water would interfere with its ability to complete the construction work at that time. [Daigle Tr., at 49-50, Docket Entry #208; JTE 128, 131].

70. On January 26th, the diver located the 64 inch cutter in the morning and it was put back on the barge to repair the pipe. [JTE 128, 131].

71. From January 27th through January 29th, Sunland attempted to open the hole to 64 inches in diameter using a 64 inch cutter head. [JTE 128, 131].

72. On January 30th, Sunland hit very hard drilling and was able to advance the 64-inch cutter head only 10-feet. [JTE 128].

73. On January 31st, the drill pipe broke off just in front of the swab leaving the cutter

assembly buried deep in the bore hole.[6] This was a significant event in that it took Sunland approximately 20 days to retrieve the cutter assembly and resume work on the project. Sunland did not notify the City or Wilbur Smith that differing subsurface conditions caused the break. [Daigle, Tr., at 49-50, Docket Entry #208; JTE 128, 131]. Sunland contends that the drill pipe broke because the cutter head seized against boulders that had collapsed into the drill path.

74. From February 1st through February 20th, Sunland worked on recovering the cutter and made no progress on the project. The recovery effort required drilling 40 foot steel sheet piling on three sides of the drill path. [JTE 128].

75. On February 11, 2005, while digging down to recover the cutter head, Mr. Kubala noted that Sunland was uncovering "lots of rock" at 30-feet. [JTE 128]. On February 13th, Mr. Kubala noted "one big rock in front of swab." [JTE 128].

76. The Wilbur Smith Geotechnical Report depicted nine to twelve-inch layers of cemented limestone in the area of pipe joint 6 where the January 31st collapse occurred. [JTE 11]. The Wilbur Smith Geotechnical Report did not specifically indicate the presence of boulders such as the ones shown in JTE 154, picture #1867, at the project site. [Lingo Tr., at 195, Docket Entry #210].

77. Wilbur Smith contends that the boulders dug up by Sunland and shown at JTE 154, picture #1867, were created when the sheet piling broke up a limestone layer, which was depicted by the Wilbur Smith Geotechnical Report. In contrast, Sunland contends that the hard

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[6] The "swab," also referred to as a barrel reamer, is a round metal barrel that is placed in front of the cutter. Its purpose is to center the cutter in the hole and to push material to the edges of the hole toward the cutters.

materials removed in the recovery effort were discrete pieces of limestone constituting a bed or horizon of boulders.

78. Wilbur Smith's expert, Zane Abernathy, a geotechnical engineer with substantial experience in the project area, testified that the hard layers are cemented to varying degrees and some areas are harder than others thereby forming pieces when the layer is broken up, but there are no independent pieces of hard material outside of the cemented layer. [Abernathy Tr., at 35-37, Docket Entry #211]. Brockman, also a witness for Wilbur Smith, drove the sheet piling and observed the removal of the material. He testified that the "boulders" were pieces of the hard layers that were broken up during drilling or driving of the sheet piling. [Brockman depo., at 49-51, Docket Entry #134-2].

79. Sunland's expert, Dr. Raymond Christopher, is a retired professor of Geology from Clemson University with extensive experience with the coastal research unit of the United States Geological Survey (USGS), a major oil company, and with significant research in the Pee Dee area of the South Carolina coast.[7] [Christopher Tr., at 143-44, Docket Entry #205]. Dr. Christopher testified that the boulders recovered from in front of the barrel reamer between February 11th and 19th and shown in JTE 154, picture #1867, are known as "concretions." Dr. Christopher further testified that the "concretions" shown in JTE 154, picture #1867, commonly occur in the Pee Dee and Myrtle Beach areas, and are not the result of the break up of

[7] At trial, Wilbur Smith objected to Dr. Christopher offering an opinion as to the cause of the bore hole collapse arguing that he was not sufficiently experienced in HDD to offer such an opinion. Dr. Christopher testified that boulders fell into the bore hole causing it to collapse when the hole reached a diameter greater than the diameter of the boulder or concretion. The court overrules Wilbur Smith's objection and finds that Dr. Christopher's testimony as to the cause of the bore hole collapse meets the standards of relevance and reliability set forth in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 589 (1993), and Rule 702 of the Federal Rules of Evidence. However, the court finds that Dr. Christopher's testimony as to causation is entitled to little weight on this issue.

limestone layers. *Id*. at 179. Dr. Christopher testified that the break up of a layer produces sharp, jagged edges, not rounded pieces. Concretions are formed in place, over time, as the result of the passage of water depositing dissolved limestone and minerals in sand. Concretions "are independent of other such structures that are contiguous with it." *Id*. at 156. Dr. Christopher concluded that the data gathered by Mr. Dickey and interpreted in the WSA Geotechnical Report, did not indicate the presence of cemented "layers," but showed the existence of a "concretionary horizon" composed of independent boulder-sized (larger than 10-inches) rocks. *Id*. at 157.

80. The "boulders" or "concretions" referred to are shown in Joint Trial Exhibits 117 and 154. In the court's opinion, some "boulders" appear to be rounded and may arguably be discrete rock formations, while other "boulders" pictured in the joint trial exhibits appear jagged as if formed during the break-up of a cemented limestone layer. The court is not satisfied by a preponderance of the evidence that the "boulders" shown in the joint trial exhibits are in fact discrete boulders taken from a concretionary horizon of independent boulder-sized rocks as Sunland contends.

81. On February 19, 2005, Sunland succeeded in extracting the barrel reamer from approximately forty feet under the beach. [Oubre Tr., at 60, Docket Entry #206; JTE 154, picture #1775]. At that time, Sunland still had sufficient time to complete the project within the 200 days allowed by the Contract. [Oubre Tr., at 60, Docket Entry #206]. The cutter head and swab were eventually pulled from the drill path approximately 60 feet down on February 19, 2005. [JTE 128].

82. After recovering the drilling assembly, Sunland continued with the reaming on the 20th

of February. Sunland installed a drill collar[8] on the drill pipe to minimize the chance of pipe breaks on future reamings.

83. On February 22nd, the drilling mud and materials on the beach evacuated into the hole. The lateral sheet piles had been left in place to help stablize the hole on the beach, but drilling fluids were not staying in the hole. [Oubre Tr., at 66, Docket Entry #206]. Sunland contends that the most likely explanation for this occurrence was water diluting the drilling fluid and flowing out into the exit pit.

84. Sunland experienced difficulties in the 52 inch and 64 inch reaming and some weather delays; however, the 64 inch cutter was pulled through the hole twice and on February 25th the hole was ready to receive the HDPE pipe. [Kubala depo., at 103-04, Docket Entry #141-3; Daigle Tr., at 53, Docket Entry #208]. However, Sunland encountered a number of problems related to equipment and weather that prevented it from pulling the pipe, [Daigle Tr., at 53, Docket Entry #208], and which were unrelated to alleged boulder problems and pressurized underwater aquifers.

85. On February 26th, one end of the HDPE pipe string came loose and Sunland spent the morning reattaching and realigning the pipe and moving the barge. Sunland started pulling the HDPE pipe in the early afternoon but stopped before the HDPE pipe was near the exit pit because there was air in the pipe, which prevented the pipe from successfully entering the completed tunnel. [Oubre Tr., at 168, Docket Entry #206; JTE 128, 131, 158].

86. On February 27th, Sunland worked on getting the air out of the pipe but did not attempt a pullback because of weather. [Oubre Tr., at 170, Docket Entry #206; JTE 128, 131].

[8] A drill collar is a thick walled pipe. It is designed to withstand greater fatigue and bending stresses in the pipe thereby reducing the chances of breaking.

87. On February 28th, Sunland's support barge broke loose overnight when some anchor cables broke. Sunland had to wait on a tugboat to come and reset the barge. The drill pipe was attached to the barge so that when the barge broke loose, the drill pipe broke a third time. A diver was called to locate the drill pipe, swab, and swivel in the tunnel. At that time, the diver discovered that the tunnel at the exit pit had filled in with sand. [JTE 128]. While trying to get the swab and swivel out of the water, a cable on the crane broke. The swab and swivel were eventually put on the barge in late afternoon and the bent drill pipe was replaced. [Oubre Tr., at 170-71, Docket Entry #206; JTE 128, 131, 158].

88. Weather and equipment breakdowns prevented Sunland from attempting another pullback on March 1st. [Oubre Tr., at 171-73, Docket Entry #206; Lairs Tr., at 95, Docket Entry #205; JTE 128, 131].

89. Sunland reconditioned the hole on March 1st with an 18 inch hole opener and 42 inch swab. They pulled the entire hole except for the last 8 joints. A blown engine on the crane prevented any progress on March 2nd and 3rd. [Oubre Tr., at 174, Docket Entry #206; Kubala depo., at 14, Docket Entry #174-2; JTE 128, 131].

90. The final pass was completed on March 4th. At noon on March 4th, the hole was once again ready for installation or pullback of the HDPE pipe. In the afternoon, Sunland bent a joint of heavy walled drill pipe while attempting to align the HDPE pipe for pullback. Equipment failure and inclement weather prevented another pullback attempt. [Oubre Tr., at 174-175, Docket Entry #206; JTE 128, 131].

91. On March 5th, Sunland attempted another pullback. Problems with the alignment of the drill pipe and drainage pipe prevented a successful pullback. [JTE 128].

92. James Daigle, Vice-President of Sunland, terminated Sunland's superintendent, Steve Kubala on March 5th because of his inability to pull the pipe.[9] [Daigle Tr., at 162-164, Docket Entry #207; JTE 92].

93. None of the events from February 26th to March 6th were caused by "boulders", "aquifers", or any other subsurface condition.

94. On March 5, 2005, Sunland's new superintendent, Jimmy Reynolds, started additional excavations on the offshore exit pit in order to decrease the angle of entry for the HDPE pipe. [Lairs, Tr. at 92-94, Docket Entry #205; JTE 128, 130, 131]. Mr. Reynolds' project diary is JTE 130.

Termination

95. On March 7th, James Daigle of Sunland advised Wilbur Smith at a job progress meeting that its progress was being slowed because of subsurface conditions; however, he was confident the pipe could be pulled and explained that the exit pit would be extended in order to pull the pipe at a milder angle which would reduce the chance of pipe connection failures. [Daigle Tr., at 57-59, Docket Entry #208; JTE 95]. Wilbur Smith and the City had no reason to doubt Sunland's assurances since Sunland's actions were consistent with Wilbur Smith and the City's understanding of the contract risk for subsurface conditions, Sunland had not given notice of a claim and the project had been slowed by many events unrelated to subsurface conditions.

96. Also at the meeting, Mr. Oubre presented a revised schedule to the City and to Wilbur

[9] Daigle testified that Kubala was replaced for other deficiencies and not because of his inability to pull the pipe. Kubala testified that he was terminated for failure to pull the pipe. I find Kubala's testimony to be more persuasive on that issue.

Smith and reflecting that work on the project would extend until July 2, 2005. [JTE 82]. Despite the delays experienced due to the broken drill pipe, inclement weather, and rough seas, Sunland was still projecting to finish within the 200 day contract period. Neither the City nor Wilbur Smith voiced any objection to this schedule, nor did either suggest that Sunland was in violation of their contractual obligations.

97. On March 9th, Sunland notified Wilbur Smith for the first time of its intent to file a claim for additional compensation due to unforeseen sub-surface conditions. [JTE 94]. Sunland claimed that it encountered large boulders and a fresh water aquifer flowing under pressure. Sunland contends that flowing fresh water caused drilling mud to flow out of the hole and that, as a result, the integrity of the hole was compromised. Sunland also claimed that boulders collapsed into the hole and caused drilling delays and damage to its equipment.

98. Although Sunland did not provide formal written notice to the City and Wilbur Smith of its claim arising from the boulders and flowing water until March 9th, Mr. Gambill of Wilbur Smith acknowledged that he had been aware of Sunland's encounters with boulders and flowing water. Mr. Gambill testified that "we knew about the discussion of boulders and aquifers, but that was always minimized, and they always told us they could work through that, it was normal to their kind of work, they knew what they were doing and they could get the job done." [Gambill Tr., at 170, Docket Entry #210].

99. Significantly, under the "errors and omissions" clause, Sunland was required to immediately notify Wilbur Smith, in writing, of any discrepancy between the Geotechnical Report and the physical conditions of the work site. The "errors and omissions" clause also cautioned that "[a]ny work done after such discovery, until authorized, will be done at the

Contractor's risk." Sunland did not notify Wilbur Smith in writing when it allegedly first encountered boulders and flowing groundwater. Instead, Sunland continued to work, all the while assuring Wilbur Smith that the work could be done and any problems with boulders or flowing water were minimal, of little significance, and would be overcome. Sunland did not formally notify Wilbur Smith in writing of the alleged problems with boulders and aquifers until March 9th, approximately 43 days after the alleged problems with flowing water were first encountered, and 26 days after Sunland began uncovering "lots of rock" during the excavation of the cutter head. *See* Findings of Fact ¶¶ 69, 75. Sunland's failure to act in a timely manner under the "errors and omissions" clause is of no consequence, however, because: 1) the Geotechnical Report accurately and fully disclosed the subsurface conditions revealed by the soil borings; 2) there was no material discrepancy between the Geotechnical Report and the physical conditions of the work site; and 3) the subsurface conditions encountered by Sunland were not materially different from the subsurface conditions indicated in the Geotechnical Report.

100. On March 11, 2005, Wilbur Smith gave Sunland notice to correct its equipment problems in order to eliminate further delays in the work. [JTE 97].

101. The additional excavation of the exit pit was completed on March 14th. From March 5th to March 14th, Sunland could not do anything to maintain the hole and the drill pipe and swab remained in the hole. On March 15th, Sunland was pumping mud in the hole attempting to clean out the exit pit and loosen the material around the swab. While working the drill pipe back and forth, the drill pipe broke at the entry pit under very little torque. [Oubre Tr., at 194-96, Docket Entry #206; JTE 128, 131]. None of the events causing problems from

February 25th to March 15th were related to "boulders", "aquifers", or any other subsurface conditions.

102. Wilbur Smith sent Sunland a cure notice on March 16, 2005, notifying Sunland that it was in default due to insufficient progress. Wilbur Smith requested that Sunland provide a plan for improvement in job progress by March 21, 2005. [JTE 101]. Sunland replied to Wilbur Smith's cure letter of March 16th on the same day and contended that job progress was slowed by "boulders" and an underground "aquifer." Sunland stated that it was "committed to completing this work in the most expeditious and economical manner" but until its investigation into the "undisclosed and unanticipated" conditions was complete it could not state how or when it would complete the project. [JTE 102]. Sunland also stated that it could not complete the work without assistance from Wilbur Smith for overcoming the site conditions. [JTE 102].

103. Sunland, the City, and Wilbur Smith's representatives met on March 16, 2005, in the late afternoon to discuss Sunland's lack of progress. At the meeting Sunland contended it could not complete the project on its own using HDD as a construction method with the present site conditions. [JTE 103]. The City and Wilbur Smith advised Sunland that subsurface risks were on the contractor and that the City was not required to pay since the contractor had not installed the pipe. James Daigle indicated that due to difficulties with "boulders" and the "aquifer" Sunland would not be able to complete the pipe installation and indicated that Sunland should cease operations. [JTE 103].

104. As of March 16, 2005, the project was significantly behind schedule, Sunland had incurred approximately $3,273,659.05 in costs and had not even installed the first of three

pipes. [Daigle Tr., at 198-99, Docket Entry #207]. Sunland's bid for the project was $4,147,996. Prior to March 9th, Sunland had not placed any significance on the difficult subsurface conditions that it had encountered.

105. Sunland's costs and delays through February 25th were caused by difficult conditions, which Sunland should have anticipated. Sunland overcame those difficult conditions and opened the hole to the required 64 inch diameter. Costs and delays after February 25th were not caused by difficult subsurface conditions, but were caused by factors within Sunland's control or factors that should have been anticipated.

106. Wilbur Smith's notes of the March 16 meeting show that Sunland described its problems with boulders and flowing water and that it had undertaken a geophysical study (the Golder Report) to ascertain the existence and extent of any boulders and aquifers. Sunland further noted its belief that the project, as designed, was not feasible due to these conditions and that as of the previous Sunday, it had determined that pulling the HDPE pipe into drill path # 1 would not be feasible. [JTE 103].

107. Sunland demobilized from the site on March 18th but continued to send letters to the City and Wilbur Smith contending that it could only complete the project with a redesign, and that there was a discrepancy between the conditions encountered at the site and the conditions as represented in the Geotechnical Report.

108. As of March 16th, the positions were set. Sunland contended it was entitled to additional money for subsurface conditions and a redesign so that the project could be completed. The City and Wilbur Smith contended that Sunland had all subsurface risks and was not entitled to additional money. [Daigle Tr., at 76-78, Docket Entry #208]. Given

Sunland's refusal to complete the project per the original design, the City had no option but to terminate Sunland. [Gambill Tr., at 128-130, Docket Entry #210].

109. Wilbur Smith and Sunland exchanged letters on March 18th. Sunland contended in its letter that the "boulders" and "aquifers" were "a discrepancy between the physical conditions of the work and your contract documents" and requested Wilbur Smith to "take all necessary action to correct this discrepancy and give Sunland direction as to the performance of the work given these discrepancies." Wilbur Smith acknowledged Sunland's claim, but Wilbur Smith declined to offer assistance on the grounds that Sunland had not submitted a plan to cure the default and the problems were Sunland's responsibility. [JTE 105, 106].

110. By early March, Sunland stood to lose substantial sums of money if it continued to work. The progression of Sunland's letters indicate a plan to force termination and lay the basis for a claim. The March 9th letter is the first notice of a claim relating to boulders and aquifers. In the March 16th letter, Sunland indicated it was investigating to determine whether the job could be performed given the existing conditions and for the first time references "omissions in the contract documents." The March 18th letter references the "errors and omissions"clause for the first time as the basis for its claim. By March 16th, Sunland knew that the job could only be completed at a substantial loss and despite Sunland's claims for a "redesign," it appears to the court that Sunland only wanted additional money for a project that it realized it had underbid. Sunland had completed less than one-third of the project, but had already incurred 3.2 million dollars in construction costs out of its total 4.1 million dollar bid for the entire project.

111. On March 18, 2005, Sunland learned that the City or Wilbur Smith (or both) had

decided to terminate Sunland for nonperformance.

112. On March 21st, Wilbur Smith advised the City that Sunland should be terminated because Sunland was unable to provide a plan to cure the defaults and indicated that it could not complete the work as designed given the subsurface conditions. [JTE 109].

113. On March 24, 2005, the City sent Sunland its notice of intent to terminate under Article IV, Responsibilities and Rights of Owner, Section I, Termination. Under that section, the City gave Sunland notice that the contract would terminate in ten days unless Sunland cured its default or satisfactory arrangements for correction of the default were made in writing. Sunland took no action in response to the March 24th letter and never made "satisfactory arrangements for corrections" of the deficiencies; therefore, the termination became effective on April 4th, ten days after the March 24th letter as provided by Article IV, Section I. The termination was proper because Sunland refused to perform the work without additional money and a redesign. [Moore Tr., at 213-16, Docket Entry #211].

114. At all times relevant to the lawsuit, Wilbur Smith and Sunland were aware of the substantial risks associated with unknown subsurface conditions and HDD as a method of construction. [Daigle Tr., at 27-28, Docket Entry #208; JTE 46]. Wilbur Smith and the City intended for those risks to be allocated to Sunland. Sunland understood Wilbur Smith and the City's intention, but assumed that if materially different subsurface conditions were encountered, the "errors and omissions" clause provided Sunland with a remedy.

115. The Court believes that HDD as method of construction was technically feasible for this project as designed by Wilbur Smith. [Hair Tr., at 17, Docket Entry #209]. However, due to Sunland's misconceptions about subsurface site conditions, Sunland grossly underestimated the

actual costs and the means of work necessary to successfully complete the project using HDD as the construction method. [JTE 70].

116. Sunland contends that it should not have been terminated because there was still significant time remaining on its schedule to perform the work. While there was still time on the contract, the parties were at a stalemate as of March 16th. Sunland was not going to perform any further work without a redesign and additional money. The City and Wilbur Smith made it clear that Sunland had assumed the risk of adverse subsurface conditions and would get no additional money. The termination is proper because there were no materially differing site conditions, Wilbur Smith's geotechnical report met the standard of care, and Sunland should have known it was assuming the risks for the events that led to the state of nonperformance.

117. The subsurface conditions encountered by Sunland were not materially different from those indicated in the Geotechnical Report. Likewise, there was no material discrepancy between the Geotechnical Report and the physical conditions of the work site. The "boulders" encountered by Sunland were made of sand limestone which is the hard layer of sediment shown in all of the soil borings. [Lingo Tr., at 171-173, 228, Docket Entry #210]. The thickness of the hard layers between the soil borings may vary and the soil borings do not indicate whether the hard layers are continuous or not. Based on the geotechnical data provided in the Geotechnical Report, Sunland should have anticipated the presence of "boulders" or hard materials they encountered on this project. [Hair Tr., at 26, Docket Entry #209]. Sunland has not established by a preponderance of the evidence that the "boulders" they encountered came from a concretionary horizon of boulders. In the court's judgment,

Wilbur Smith's theory that the "boulders" encountered on this project came from the breakup of a limestone layer is as plausible as Sunland's theory that the "boulders" came from a concretionary horizon of boulders. Accordingly, the court finds that Sunland has failed to establish by a preponderance of the evidence that the "boulders" encountered represent a materially different site condition or a material discrepancy from the conditions indicated in the Geotechnical Report.

118. The geotechnical data provided to Sunland did not address the presence or absence of an aquifer. [Gambill Tr., at 32, Docket Entry #210]. The geotechnical data indicated groundwater levels in Borings B4 and B5; however, as noted by John Hair, it is unlikely that a standard subsurface exploration program would detect the flowing groundwater conditions described by Sunland. [JTE 94]. In any event, based on the tests conducted by Wilbur Smith's expert, Zane Abernathy, there is no high pressure aquifer in the area of the project. As Abernathy noted, there is freshwater at certain depths but it is not under pressure such that it would be "flowing" like a high pressure aquifer. While a strong flow of water came from the hole on January 25th and 26th, the flow was limited to two days and had no significant impact on Sunland's progress. The event was localized and limited in duration and not something that could have been addressed in the Geotechnical Report. [Abernathy Tr., at 39-53, Docket Entry #211]. Although the Golder Report, which Sunland commissioned in anticipation of this litigation, suggested the presence of fresh water within the project vicinity, the Golder Report did not address whether that fresh water was under pressure. [Sylwester Tr., at 124, Docket Entry #205]. The court finds that Sunland has failed to establish by a preponderance of the evidence that a pressurized fresh water aquifer existed at the project site or that if there was

one it had any significant effect on the completion of the project.

119. Sunland knew of the City's intent to shift the risk of subsurface conditions to the Contractor and should have known that it assumed all subsurface risks when it bid the project. However, Sunland submitted its bid with no contingency for adverse subsurface conditions believing that the "errors and omissions" clause provided it with a remedy in the event unforeseen subsurface risks were encountered. The Geotechnical Report was provided to Sunland and others in early August 2004. Bids were submitted in late October 2004. Sunland had almost three months to evaluate the Geotechnical Report. Sunland chose not to conduct any investigations and raised no questions regarding the geotechnical data submitted. [Daigle Tr., at 6-7, 9, 19-22, Docket Entry #208]. As reflected by the discrepancy of the HDD bids (Sunland $4,147,996; Mears $13,880,000; Michels $18,984,950), the other HDD bidders, Mears and Michels, apparently understood that the contractor was to assume all subsurface risks and their bids evidently took that into account.

120. Sunland raised no issues that required Wilbur Smith's evaluation until March 9th when it first gave notice of a claim. By March 16th, Sunland had declared that it would not complete the project without a redesign and, more importantly, additional money. It is unreasonable to expect the engineer to have investigated, evaluated, and resolved the issues within 7 days. After the March 16th meeting, a response by Wilbur Smith was unnecessary given the parties positions. By March 16th, the damages sought by Sunland had been incurred and no action by Wilbur Smith after March 9th could have prevented Sunland's losses. Wilbur Smith's performance of its construction administration duties had no impact on Sunland's damages.

121. Wilbur Smith properly recommended termination of Sunland given Sunland's position at the March 16th meeting. The work under Wilbur Smith's design was not impossible. It was more difficult and expensive to perform than Sunland anticipated.

City's damages

122. Sunland failed to complete the project and the City incurred damages as a result of Wilbur Smith's acts and omissions. The contract for the Deephead Swash Outfall Project should have been awarded to Misener and completed for the amount of Misener's first bid of $4,467,000. Instead of that amount, after Sunland was terminated, the City was required to pay Misener the amount of $4,877,444 on a second bid to complete the project. In addition, Wilbur Smith charged the City $49,325 for engineering services to rebid the project. The total amount paid by the City to complete the project over Misener's initial bid was $4,926,769. As a result, the City incurred actual damages in the amount of $459,769.

123. In addition, as a direct and proximate result of Wilbur Smith's negligence and breach of its consulting agreement, the City was sued by Sunland and forced to defend itself in the above captioned lawsuit. Under the terms of the indemnity agreement, Wilbur Smith had the duty to investigate, handle, respond to, provide defense for and defend the same at its sole expense and Wilbur Smith agreed to bear all other costs and expenses related thereto. In breach of the indemnity provisions of the consulting agreement, Wilbur Smith failed to perform those duties to the City. [Andrews Tr., at 20, Docket Entry #212; JTE 1].

124. In summary, Sunland has failed to meet its burden of proof in its claims against the City and Wilbur Smith for breach of warranty of the sufficiency of the plans. Sunland has failed to meet its burden of proof with regard to its claims of negligence against Wilbur Smith.

Sunland and the City have both failed to meet their burden of proof with regard to their respective breach of contract claims. The City has met its burden of proof regarding its negligence claim against Wilbur Smith but has not met its burden of proof regarding its negligence claim against Coastal Science. The City has not met its burden of proof with regard to a negligent misrepresentation claim against Wilbur Smith nor against Coastal Science. The City has met its burden of proof for indemnification by contract against Wilbur Smith. Wilbur Smith has not met its burden of proof on a claim for indemnification against Coastal Science. Finally, the City has failed to meet its burden of proof on its surety claim for recovery on the performance bond provided by Hartford for Sunland.

Conclusions of Law

I. Breach of Warranty of the Sufficiency of the Plans

A. Sunland v. The City, Wilbur Smith

Sunland claims that the City and Wilbur Smith breached an implied warranty that the plans and specifications set forth in the contract documents were sufficient for the design and construction of an HDD project. Specifically, Sunland's breach of warranty claim is based on the proposition that the Geotechnical Report performed by Wilbur Smith, and incorporated into the contract documents, was inaccurate to the extent that the Geotechnical Report did not reflect the presence of boulders or concretions and flowing groundwater under pressure, the presence of which can be detrimental to HDD construction. Sunland argues that the City and Wilbur Smith each represented to Sunland that the subsurface conditions along the proposed drill path were accurately reflected in the August 2004 Geotechnical Report and that conditions adverse to HDD did not exist. Sunland contends that adverse conditions did in fact exist, i.e.

the presence of boulders and flowing groundwater under pressure, and that these adverse conditions were the proximate cause of the difficulties encountered by Sunland. In sum, Sunland seeks actual damages for increased construction costs due to the presence of boulders and flowing groundwater under pressure, which Sunland contends represents a materially different site condition from the site conditions represented in the plans. Sunland relies on the implied warranty of plans and specifications recognized in *United States v. Spearin*, 248 U.S. 132 (1918), and *Hill v. Polar Pantries*, 64 S.E.2d 885 (S.C. 1951).

In *United States v. Spearin*, the United States Supreme Court stated that:

> Where one agrees to do, for a fixed sum, a thing possible to be performed, he will not be excused or become entitled to additional compensation, because unforeseen difficulties are encountered. Thus one who undertakes to erect a structure upon a particular site, assumes ordinarily the risk of subsidence of the soil. But if the contractor is bound to build according to plans and specifications prepared by the owner, the contractor will not be responsible for the consequences of defects in the plans and specifications. This responsibility is not overcome by the usual clauses requiring builders to visit the site, to check the plans, and to inform themselves of the requirements of the work.

248 U.S. 132, 136 (1918) (emphasis added) (internal citations omitted). Similarly, in *Hill v. Polar Pantries*, the South Carolina Supreme Court held that "if a party furnishes specifications and plans for a contractor to follow in a construction job, he thereby impliedly warrants their sufficiency for the purpose in view." 64 S.E.2d 885, 888 (S.C. 1951). Sunland also relies on *Robert E. Lee & Co., Inc. v. Comm'n of Public Works*, 149 S.E.2d 55, 57 (S.C. 1966), for the proposition that the Geotechnical Report "was a representation that the subsurface information revealed by the test hole borings had been accurately and fully disclosed on the plans" and "[t]he contractor was entitled to rely upon that representation; and the owner's responsibility

under it was not overcome by the disclaimer clauses." *Robert E. Lee & Co.*, 149 S.E.2d at 58."

As indicated in these Findings of Fact, the court has found by a preponderance of the evidence that the Geotechnical Report prepared by Wilbur Smith was sufficient for the design and construction of this HDD project, and there were no defects in the plans and specifications. Also, based on the testimony of John Hair and Zane Abernathy, and particularly Hair, the court has found that the subsurface information revealed by the soil borings was accurately and fully disclosed in the Geotechnical Report. *See* Findings of Fact ¶ 33. Sunland has failed to establish that the conditions encountered during this project constitute materially different site conditions from the conditions reflected in the Geotechnical Report. *See* Finding of Fact ¶¶ 117-118. Accordingly, the court concludes that Sunland has failed to meet its burden of proof on its breach of warranty claim.

Additionally, the court finds that Section 2210 of the Specifications, which states that "[t]he Owner and Engineer make no warranties as to the completeness or correctness of the information contained herein and the Contractor shall use his own judgment in evaluating the nature of the subsurface conditions," effectively disclaimed any implied warranties as to the completeness or correctness of the Geotechnical Report prepared by Wilbur Smith or the geotechnical data contained therein. To the extent Sunland contends that the *Robert E. Lee* case holds that such disclaimers are ineffective, the court finds the *Robert E. Lee* case to be distinguishable on its facts.

In *Robert E. Lee & Co., Inc. v. Comm'n of Public Works*, a contractor brought suit against Greenville's public works commission for the increased cost of constructing a pipeline

when the contractor encountered subsoil conditions that were not disclosed in the plans. 149 S.E.2d at 57. Just as in the instant case, the Owner in *Robert E. Lee & Co.* performed soil borings along the pipe line route to determine the character of the subsurface materials. *Robert E. Lee & Co.*, 149 S.E.2d at 57. The results of the soil borings, showing subsoil classification and the location of ground water, were logged in the field notes of the defendant's supervising engineer. *Id*. Although the true results of the soil borings were known to the Owner and recorded in the supervising engineer's field notes, the Owner did not disclose the unfavorable subsoil conditions recorded in the engineer's field notes, such as the presence of subsurface groundwater and certain subsoil materials. *Id.* The defendant admitted that the plans failed to disclose the unfavorable subsoil conditions, but argued, among other things, that a disclaimer contained within the plans prevented the plaintiff from establishing liability. *Id*. Under those facts, the South Carolina Supreme Court held that the disclaimer did not exonerate an owner who showed subsurface conditions on plan documents, but excluded unfavorable conditions revealed by the test borings. *Id*. at 58.

Unlike the instant case, *Robert E. Lee* involved an intentional misrepresentation of the subsoil conditions. Sunland does not claim that Wilbur Smith intentionally omitted unfavorable subsurface conditions in its Geotechnical Report. In *Robert E. Lee*, the owner was aware that unfavorable conditions existed as those unfavorable conditions were reflected in the supervising engineer's field notes. Nothing in the case at bar suggests that Wilbur Smith was aware of pressurized aquifers or a horizon of boulders and then intentionally excluded that

information from its Geotechnical Report.[10] In the court's opinion, *Robert E. Lee* simply stands for the proposition that when an Owner undertakes to represent the subsoil conditions in plans and specifications, the Owner cannot intentionally misrepresent the subsoil conditions and hide behind a disclaimer. *See, e.g.* 17 S.C. Juris. *Construction Law* § 33.

This case is more comparable to *L-J, Inc. v. South Carolina State Highway Department*, in which the plaintiff contractors brought, among other things, a claim for breach of implied warranty alleging that the geotechnical data provided to bidders was inaccurate. 242 S.E.2d 656, 658 (S.C. 1978). During the project, the contractors encountered more hard rock than originally anticipated. The contractors brought suit to recover the additional costs incurred as a result of the unanticipated rock. In determining whether the evidence warranted a finding of breach of implied warranty, the Supreme Court noted that the soil borings contained no false representations and that each boring was a true representation of the content of the earth at the site of the boring. *L-J, Inc.*, 242 S.E.2d at 665. The Court further noted that the "Contractors' problem arises because the borings were misinterpreted. It was assumed that rock lay on a level plane and this assumption was simply erroneous." *Id*. The Court reversed the trial court's judgment in favor of the plaintiff contractors and concluded that the plaintiff contractors "took a risk for a consideration, and have no right to call upon the courts to protect them against the consequences of erroneous judgment formulated by their own carelessness and failure to make adequate tests and investigation prior to bidding." *Id*.

Like the plaintiff contractors in *L-J, Inc.*, a preponderance of the evidence suggests that

[10] The court has found that Sunland failed to establish by a preponderance of the evidence that either a pressurized aquifer or a horizon of independent discrete boulders existed at the project site. *See* Findings of Fact ¶¶ 117-118.

Sunland misinterpreted the Geotechnical Report and made unreasonable assumptions concerning the subsurface conditions. Sunland's assumptions regarding the subsurface conditions were unreasonable especially in light of the fact that there is always some degree of uncertainty concerning subsurface conditions that exist between soil borings in any geotechnical investigation. *See* [Daigle Tr., at 28, Docket Entry #208; Hair Tr., at 28-30, Docket Entry #209].

For those reasons, Sunland's claim for breach of warranty of the sufficiency of the plans and specifications against Wilbur Smith and the City fails.

II. Breach of Contract

Sunland contends that the City, upon the advice of Wilbur Smith, wrongfully terminated Sunland's contract. Sunland argues that the only ground for termination advanced by the City or Wilbur Smith was Sunland's lack of progress. Sunland acknowledges that it experienced delays but contends that because the delays were due to conditions for which Sunland was not responsible, i.e. adverse weather conditions, the presence of boulders and flowing groundwater, the termination was wrongful and without justification. Sunland also notes that when it was terminated, there remained adequate time under the contract to complete the project.

The court concludes, however, that Sunland has not met its burden of proof on its breach of contract claim. The City's termination of Sunland was justified because Sunland refused to complete the project without additional compensation and a redesign of the project. Sunland claimed that the project was not feasible as an HDD project and that it was entitled to a redesign and additional compensation for costs incurred as a result of materially different subsurface conditions. However, as noted above, the project was feasible as an HDD project

and there were no materially different site conditions from those reflected in the Geotechnical Report. *See* Findings of Fact ¶¶ 47, 115, 117-118. Therefore, Sunland was not entitled to a redesign or additional compensation.

Sunland simply failed to fully appreciate that the contractor bore the risk of subsurface conditions and significantly underbid this project. As of the date Sunland was terminated, Sunland had incurred approximately $3,273,659 in costs and had not installed the first of the three pipes. There was no way for Sunland to complete the project at the $4,147,996 price it originally bid.

Sunland's significantly low bid resulted from its mistaken belief that it did not bear the risk of subsurface conditions. [Daigle Tr., at 114-115, Docket Entry #208]. As a result, Sunland did not add a contingency in its bid for subsurface conditions and the only risk Sunland calculated into its bid was for weather delays. *Id*.

The elements required for formation of a contract are an offer, acceptance, and valuable consideration. *Sauner v. Public Serv. Auth. of South Carolina*, 581 S.E.2d 161, 166 (S.C. 2003). In order for a contract to arise, there must be a meeting of the minds of the parties involved with regard to all essential and material terms of the agreement. *Player v. Chandler*, 382 S.E.2d 891, 893 (S.C. 1989).

In the present case, Sunland and the City of Myrtle Beach did not have a meeting of the minds with regard to all essential and material terms of the agreement. Specifically, there was no meeting the minds as to which party would assume the risk that the project could not be completed as designed because of unknown site conditions. Wilbur Smith and the City intended the presence of a "no hole, no pay" clause together with the absence of a "differing

site condition" clause to keep all risks for performance of the contract on Sunland. Sunland's representative testified Sunland was aware of the City and Wilbur Smith's intent that the risks be placed on the contractor. However, Sunland assumed that because Wilbur Smith's Geotechnical Report was included in the contract documents and the contract contained an "errors and omissions" clause, the City assumed the risks for unknown site conditions that were not disclosed in the Geotechnical Report. [Daigle Tr., at 134, Docket Entry #208].

Allocation of risks for subsurface conditions was a material term of the contract. Sunland's representative testified that if Sunland had believed that it assumed the risk for differing subsurface conditions its bid would have included a contingency for unknown subsurface conditions. [Daigle Tr., at 114-16, Docket Entry #208]. On the other hand, the City did not intend to assume, and Wilbur Smith, its agent, did not intend for it to assume, any risks for the site conditions. [Andrews Tr., at 23-24, Docket Entry #212]. Sunland and the City did not have a meeting of the minds on the allocation of risks for site conditions. Therefore, both Sunland's claim for breach of contract, and the City's counterclaim for breach of contract are denied. *See Hardaway Concrete Co., Inc. v. Hall Contracting Corp.*, 647 S.E.2d 488 (S.C. Ct. App. 2007) (requiring a meeting of the parties' minds on all material terms of the agreement).

Normally, when there is no meeting of the minds, a contract is rescinded, there is a return of the consideration paid, and the damages are awarded on a quantum meruit basis. *See Costa and Sons Const. Co., Inc. v. Long*, 412 S.E.2d 450, 452 (S.C. Ct. App. 1991). However, in this case, since the contract was a "no hole, no pay" lump sum contract, the City has not paid any consideration to Sunland. Also, due to the nature of HDD as a construction method,

Sunland cannot make a claim for quantum meruit or breach of implied contract because it has not conferred a benefit on the City. *Id*. Recovery under quantum meruit in South Carolina is based on a quasi-contract theory, the elements of which are: (1) a benefit conferred upon the defendant by the plaintiff; (2) realization of that benefit by the defendant; and (3) retention by the defendant of the benefit under conditions that make it unjust for him to retain it without paying its value. *Trident Const. Co., Inc. v. Austin Co.*, 272 F. Supp. 2d 566, 577 (D.S.C. 2003). The end result is that neither the City nor Sunland can recover damages under a claim for breach of contract. *See Costa and Sons Const. Co., Inc.*, 412 S.E.2d at 452.

III. Negligence

A. Sunland v. Wilbur Smith

Sunland claims that Wilbur Smith was negligent in the design of the project and in the administration of the contract in at least three respects: 1) Wilbur Smith negligently failed to notice that the pipelines as designed extended into an ancient riverbed ("paleochannel") likely to be filled with more permeable materials than the surrounding strata; 2) Wilbur Smith negligently failed to understand the surrounding geology of the Pee Dee in which limestone occurs as horizons of discrete concretionary boulders; and 3) Wilbur Smith negligently failed to perform investigations to identify ground conditions detrimental to HDD. In essence, Sunland claims that Wilbur Smith was negligent because it failed to identify the existence of boulders and flowing groundwater in the Geotechnical Report. Sunland also claims that Wilbur Smith was negligent in construction administration. In particular, Sunland claims that Wilbur Smith was negligent in not responding to Sunland's claim under Art. III, Section V requesting a solution to the problems they experienced with boulders and flowing water and in violating its

duties as an impartial decision maker.

In order to establish a cause of action for negligence, a plaintiff must prove: 1) a duty of care owed by defendant to the plaintiff; 2) breach of that duty by a negligent act or omission; and 3) damages proximately resulting from the breach of duty. *Snavely v. Amisub of South Carolina, Inc.*, 665 S.E.2d 222, 226 (S.C. Ct. App. 2008). In a professional negligence case such as this, the plaintiff must prove the professional breached the standard of care by failing to conform to generally recognized and accepted practices in the profession. *City of York v. Turner-Murphy Co., Inc.*, 452 S.E.2d 615, 616-17 (S.C. Ct. App. 1994). If the plaintiff is unable to demonstrate that the professional failed to conform to the generally recognized and accepted practices in his profession, then the professional cannot be found liable as a matter of law. *Doe v. American Red Cross Blood Servs.*, 377 S.E.2d 323, 326 (S.C. 1989). Where professional negligence is alleged, expert testimony is usually necessary to establish both the standard of care and the professional's deviation from that standard, unless the subject matter is within the area of common knowledge and experience of the layman so that no special learning is needed to evaluate the professional's conduct. *Hoeffner v. The Citadel*, 429 S.E.2d 190, 192 (S.C. 1993).

As to Sunland's claim against Wilbur Smith alleging professional negligence in the preparation of the Geotechnical Report, the court has found by a preponderance of the evidence that Wilbur Smith met the standard of care in its preparation of the Geotechnical Report. *See* Findings of Fact ¶ 33. Because Sunland has not demonstrated that Wilbur Smith breached the standard of care in the preparation of the Geotechnical Report, Sunland's claim fails as a matter of law.

As to Sunland's claim against Wilbur Smith alleging professional negligence in construction administration, any alleged negligence of Wilbur Smith did not proximately cause Sunland's damages. *See* Findings of Fact ¶ 120. Sunland's damages were proximately caused by the fact that it failed to appreciate the risk of subsurface conditions, misinterpreted the geotechnical data, underbid the project, and had various equipment problems unrelated to boulders or aquifers. Sunland knew of the City's intent to shift the risk of subsurface conditions to the Contractor and should have known that it assumed all subsurface risks when it bid the project. *See* Findings of Fact ¶ 119. The court finds by a preponderance of the evidence that Sunland has not proven its negligence claim against Wilbur Smith.

B. The City v. Wilbur Smith and Coastal Science

As an initial matter, the court finds by a preponderance of the evidence that Coastal Science did not breach any applicable standard of care in this case. In particular, the court finds by a preponderance of the evidence that Coastal Science did not breach the standard of care in the design of the HDD project, in prequalifying Sunland as a bidder on this project, or in recommending HDD as an alternative construction method to the trench or cut and cover method. [Hair Tr., at 18, Docket Entry #209]. The greater weight of the evidence indicates that HDD was technically feasible as a method of construction for this project. *See* Findings of Fact ¶ 115. Accordingly, the City has failed to meet is burden of proof with regard to any negligence claim against Coastal Science.

As to the City's claim against Wilbur Smith, the City has made a claim for damages for Wilbur Smith's breach of professional responsibility resulting from its relationship as an engineer and professional consultant to the City. In the present case Wilbur Smith held the

position of consultant for professional services and assumed the duties of the engineer for the City. In that position, Wilbur Smith had a special relationship with the City that supports a tort action for professional negligence.

Engineering malpractice occurs when the engineer fails to exercise that degree of care and skill which is ordinarily employed by the profession generally, under similar conditions in like surrounding circumstances. *Tommy L. Griffin Plumbing & Heating Co. v. Jordan, Jones & Goulding, Inc.*, 570 S.E.2d 197, 206 (S.C. Ct. App. 2002). The City has shown by a preponderance of the evidence that Wilbur Smith breached the standard of care of a similarly situated Professional Engineer by: 1) recommending that the contract be awarded to Sunland without first investigating the vast bid disparity among the HDD bids; and 2) undertaking to evaluate the HDD bids and recommend a lowest responsible bidder even though Wilbur Smith did not have the expertise or competence to evaluate HDD bids or make recommendations concerning the lowest responsible HDD bidder. *See* Findings of Fact ¶¶ 60-61. In sum, Wilbur Smith breached the standard of care owed by a Professional Engineer by undertaking acts for which it was not qualified.

Damages are proximately caused if they are the foreseeable result of the defendant's tortious act. *Young v. Tide Craft, Inc.*, 242 S.E.2d 671, 675-76 (S.C. 1978). The City has shown that Wilbur Smith's negligence proximately caused the City to select Sunland's bid and caused the City to pay an additional $459,769 above what it should have paid to complete the outfall project. The additional payments of $459,769 were foreseeable damages resulting from Wilbur Smith's improper acts and omissions. The City is entitled to an award of damages for that amount against Wilbur Smith. Accordingly, the court concludes that the City has met its

burden of proof on its negligence claim against Wilbur Smith.

IV. Negligent Misrepresentation

The City has also advanced a negligent misrepresentation claim against Wilbur Smith and Coastal Science based on Sunland's allegation that Wilbur Smith falsely represented the subsurface conditions for the project. The City contended that if the court finds that the subsurface conditions were falsely represented, then the City would have a claim for negligent misrepresentation against Wilbur Smith and Coastal Science. *See* [Amended Answer, at ¶ 57, Docket Entry #30].

Because the court has found that the Geotechnical Report was not below the standard of care and the subsurface conditions were accurately and fully disclosed in the Geotechnical Report, Findings of Fact ¶ 33, the City's negligent misrepresentation claim fails.

V. Equitable Indemnification and/or Indemnification by Contract

A. The City v. Wilbur Smith

The City has also brought claims against Wilbur Smith for indemnification based on contract and equitable principles.

The law of equitable indemnification allows recovery of expenses when the act of the wrongdoer involves the innocent defendant in litigation or places him in such relation with others as makes it necessary to incur expenses to protect his interest. *Vermeer Carolina's, Inc. v. Wood/Chuck Chipper Corp.*, 518 S.E.2d 301, 305 (S.C. Ct. App. 1999). "Expenses" include any costs which are reasonably necessary to defend litigation or otherwise protect the innocent party's interest. *Vermeer Carolina's, Inc.*, 518 S.E.2d at 305. "For a party to recover under a theory of equitable indemnification, three things must be proven: (1) the indemnitor

was liable for causing Plaintiff's damages; (2) the indemnitee was exonerated from any liability for those damages; and (3) the indemnitee suffered damages as a result of the Plaintiff's claims against it which were eventually proven to be the fault of the indemnitor." *Id*. at 307. Here, neither Wilbur Smith nor the City were found liable to Plaintiff Sunland.

As for indemnification by contract, in the consulting agreement, Wilbur Smith agreed to indemnify the City from any and all losses and damages arising out of or relating to the breach of the consulting agreement or by the negligence or willful misconduct of Wilbur Smith. In general, indemnity may be defined as a "form of compensation in which a party is liable to pay a second party for loss or damage the second party incurs to a third party." *Rock Hill Telephone Co., Inc. V. Globe Communications, Inc.*, 611 S.E.2d 235 (S.C. 2005). Contractual indemnity involves a transfer of risk for consideration, and the contract itself establishes the relationship between the parties. James C. Gray, Jr. and Lisa D. Catta, *The Law of Indemnity in South Carolina*, 41 S.C.L.Rev. 603, 604 (1990).

In its contract with the City, Wilbur Smith agreed to investigate, handle, respond to, provide defense for and defend the City at its sole expense and agreed to bear all other costs and expenses related thereto.

Based on the language of the indemnification clause of the consulting agreement, the City is entitled to recoup reasonable expenses and attorney fees incurred in defending the claims against it.

B. Wilbur Smith v. Coastal Science

Wilbur Smith's claim against Coastal Science for either contractual indemnity or equitable indemnity fails. Coastal Science did not violate any standard of care owed in this

case and was not at fault and there is no basis for Wilbur Smith to assert that it is entitled to be indemnified.

VI. Surety Claim/Performance Bond

The court found that there was no meeting of the minds between Sunland and the City on the contract claim; therefore, the City's surety claim for recovery on the performance bond provided by Hartford for Sunland fails.

Conclusion

In summary, the court finds:

1) On Sunland's breach of warranty claim against the City and Wilbur Smith, in favor of the City and Wilbur Smith;

2) On the breach of contract claim and counterclaim between the City and Sunland, both claims fail and neither party can recover damages arising from the alleged breach;

3) On Sunland's negligence claim against Wilbur Smith, in favor of Wilbur Smith;

4) On the City's negligence claim against Coastal Science, in favor of Coastal Science;

5) On the City's negligence claim against Wilbur Smith, in favor of the City and the City is awarded $459,769 in actual damages;

6) On the City's negligent misrepresentation claim against Wilbur Smith and Coastal Science, in favor of Wilbur Smith and Coastal Science;

7) On the City's claim for indemnification against Wilbur Smith, in favor

of the City;

8) On Wilbur Smith's claim for indemnification against Coastal Science, in favor of Coastal Science; and

9) On the City's surety claim against Hartford, in favor of Hartford.

With regard to its contractual indemnification claim, the City is directed to file a petition of attorney's fees and application for costs consistent with these Findings of Fact and Conclusions of Law within five (5) days from the date of this Order. The City's petition shall comply with the requirements set forth in *Barber v. Kimbrell's, Inc.*, 577 F2d 216 (4th Cir. 1978), and Local Civil Rule 54.02.

IT IS SO ORDERED.

Florence, SC
December 22, 2008

s/ R. Bryan Harwell
R. Bryan Harwell
United States District Judge