

STATE OF SOUTH CAROLINA  
IN THE COURT OF APPEALS

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APPEAL FROM THE ADMINISTRATIVE LAW COURT  
John D. McLeod, Administrative Law Judge

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Case No. 08-ALC-07-0221-CC  
Appellate Case No. 2009-135686

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Deerfield Plantation Phase IIB Property Owners Association ..... Appellant,

vs.

South Carolina Department of Health and Environmental Control,  
Deertrack Golf, Inc., and Bill Clark Homes of Myrtle Beach, LLC ..... Respondents,

vs.

Bill Clark Homes of Myrtle Beach, LLC ..... Respondents.

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**RECORD ON APPEAL  
VOLUME I OF II**

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**STATE OF SOUTH CAROLINA  
ADMINISTRATIVE LAW COURT**

Deerfield Plantation Property Owners  
Association,

Petitioner,

-vs-

South Carolina Department of  
Health and Environmental Control  
and Deertrack Golf, Inc.,

Respondents.

-vs-

Bill Clark Homes of Myrtle Beach, LLC,

Intervenor.

Docket No. 08-ALJ-07-0221-CC

**ORDER ON RESPONDENT'S  
AND INTERVENOR'S  
MOTION IN LIMINE**

**FILED**

FEB 26 2009

**SC ADMIN. LAW COURT**

This matter is before me on a Motion in Limine filed by Respondent Deertrack Golf, Inc. ("Deertrack") and Intervenor Bill Clark Homes of Myrtle Beach, LLC ("Bill Clark Homes"). The movants seek to exclude from the record particular evidence on the grounds that it is irrelevant and inadmissible. Specifically, the movants request that this Court exclude any and all evidence related to the question of whether any portion of the subject property contains "Waters of the United States" as that term is applied for determining jurisdiction of the United States Government pursuant to Section 404 of the Clean Water Act, 33 U.S.C. §1344 ("CWA"). For the reasons set forth herein, I find that the Motion in Limine should be granted.

Petitioner has requested a contested case hearing to challenge Respondent S.C. Department of Health and Environmental Control's ("the Department") issuance of coverage under the National Pollutant Discharge Elimination System ("NPDES") General Permit for Storm Water Discharges from Large and Small Construction Activities, issuance of a land disturbance permit in accordance with 26 S.C. Code Ann. Reg. 72-300 et seq. and S.C. Code Ann. §48-14-10 et seq., and a Coastal Zone Consistency Certification. Deertrack received

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coverage authorizing land disturbance on the subject property known as the "Old South Golf Course" located in Horry County near Surfside Beach.<sup>1</sup> Petitioner alleges that "waters of the State" exist on site and the Department did not adequately evaluate the impacts to these waters. Petitioner claims there are two types of "waters of the State," which will be impacted by the storm water plan at issue: 1) open water areas in the form of ponds and ditches; and 2) wetlands. However, Petitioner has expressed its intention to introduce evidence in the form of testimony and written documentation to prove the site also contains "Waters of the United States." It is this evidence that movants argue is irrelevant to the issues before me. Petitioner argues that a finding that a site is a "water of the United States" makes it more likely that the site is a "water of the State" and that this is a relevant issue. Comparison of these two terms shows the inaccuracy of Petitioner's position.

The only definition of "waters" or "waters of the state" in South Carolina statute or regulations is contained in S.C. Code § 48-1-10(2) and at S.C. Reg. 61-9.122.2. That definition reads as follows:

"...lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic Ocean within the territorial limits of the State, and all other bodies of surface or underground water, natural or artificial, public or private, inland or coastal, fresh or salt, which are wholly or partially within or bordering the State or within its jurisdiction.

The definition of waters of the United States is similar in some respects, but is necessarily more restrictive because of the constitutionally mandated limitation that the federal government may exercise jurisdiction only over areas affecting interstate or foreign commerce. The definition includes "all waters" (and includes a list of various types of waters), but limits inclusion within the designation to waters "the use, degradation or destruction of which could affect interstate or foreign commerce." 33 C.F.R. Part 328.1.

Petitioner has stated that it will offer proof that some part of the subject site is currently a wetland. Proof that an area is a *wetland* meeting the definition contained in 24 S.C. Code Ann. Reg. 61-9.122.2 does not involve proof that the area has a significant nexus to federal navigable waters. It requires proof that the area reflects all three parameters of the method for delineating a wetland set forth in the manual developed by the U.S. Army Corps of Engineers and generally

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<sup>1</sup> Intervenor Bill Clark Homes is under contract to purchase the Old South Golf Course and intends to develop the property into a residential subdivision.

accepted for this purpose – soils associated with periodic flooding, vegetation adapted for life in saturated soil and the presence of water at a frequency and duration sufficient to create saturated conditions to support wetland vegetation. To qualify as a “water of the United States,” an area meeting this criteria must also be shown to have a significant nexus to interstate commerce.

Prior to the submission of their application to the Department, Respondent Deertrack Golf, Inc., obtained a determination from the U.S. Army Corps of Engineers (“Corps”) that there are no jurisdictional wetlands or waters of the United States on the Old South Golf Course. The consequence of this determination is that a permit from the Corps is not required for the placement of fill material into “Waters of the U.S.” pursuant to the Clean Water Act. Despite this official determination of no jurisdiction, Petitioner seeks to submit testimony and evidence that is intended to challenge it. This Court will not consider an issue (the accuracy of the Corps’ wetland determination) that is not within its authority to address. Petitioner concedes that this Court lacks jurisdiction over the Corps.

The main purpose of a motion in limine is to prevent admission of prejudicial evidence. State v. Floyd, 295 S.C. 518, 520, 369 S.E.2d 842, 843 (1988). “Evidence which is not relevant is not admissible.” S.C.R.E. Rule 402. S.C.R.E. Rule 403 provides that “Although relevant, evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of evidence.”

Even if a reviewing Court were to conclude that this evidence is relevant, the disadvantages outweigh the benefits of admission. Respondent and Intervenor do not challenge Petitioner’s right to attempt to prove the existence of wetlands or other waters of the State on the subject property. However, if the Petitioner truly intends to focus on “establishing that the ponds, lakes, channels and ditches on the subject property are ‘waters of the State’ as defined in the state statutes and regulations pertinent to storm water permits,” then evidence on the presence of “Waters of the U.S.,” and essentially the accuracy or inaccuracy of the Corps’ determination, is not necessary and will needlessly burden the Court and the parties. Further, the prejudice to the Petitioner on this point is minimal. By Petitioner’s own representation, the Property Owners Association has served the Corps with notice of its intent to file a citizens suit under the Clean Water Act to challenge the Corps’ jurisdictional determination. Should it become apparent at the hearing that this evidence is relevant and necessary, I will address it at that time. “A ruling on

the motion is not the ultimate disposition on the admissibility of evidence. It remains subject to change based on developments during trial." State v. Floyd, 369 S.E.2d at 843.

### ORDER

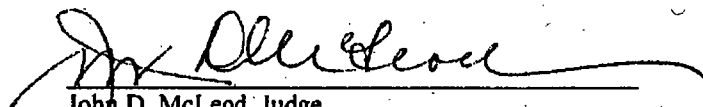
THEREFORE, based on the foregoing reasons, the Motion in Limine is granted as to the following evidence:

1. Proof of current federal jurisdiction pursuant to the Clean Water Act over "waters of the United States;
2. Proof of past federal jurisdiction pursuant to the Clean Water Act over "waters of the United States.

Nothing herein shall bar proof of the current existence of any category included in the definition of "waters of the State" at 24 S.C. Ann. Reg. 61-9.122.

**AND IT IS SO ORDERED.**

February 26, 2009  
Columbia, SC

  
John D. McLeod, Judge  
S.C. Administrative Law Court

CERTIFICATE OF SERVICE  
This is to certify that the undersigned has this date served this order in the above entitled action upon all parties to this cause by depositing a copy hereof, in the United States mail, postage paid, or in the Interagency Mail Service addressed to the party(ies) or their attorney(s).

This 26 day of February, 2009  
By: Anthony R. Waldman  
Judicial Law Clerk

STATE OF SOUTH CAROLINA  
ADMINISTRATIVE LAW COURT

Deerfield Plantation Phase II B  
Property Owners Association,  
  
Petitioner,

-VS-

South Carolina Department of  
Health and Environmental Control  
and Deertrack Golf, Inc.,

Respondents.

-VS-

Bill Clark Homes of Myrtle Beach, LLC,

Intervenor.

Docket No. 08-ALJ-07-0221-CC

FINAL ORDER AND DECISION

**FILED**

JUN 08 2009

SC ADMIN. LAW COURT

Appearances

*Petitioner:*

*James S. Chandler, Esq.*

*Amy E. Armstrong, Esq.*

*Respondent, SCDHEC:*

*Elizabeth A. Dieck, Esq.*

*Respondent,*

*Deertrack Golf, Inc.:*

*Mary D. Shahid, Esq.*

*Intervenor:*

*Stanley E. Barnett, Esq.*

**FILED**

JUN 09 2009

SC ADMIN. LAW COURT

This matter was before me for a contested case hearing on March 10, 11, and 12, 2009. Petitioner challenges the decision of Respondent, South Carolina Department of Health and Environmental Control ("DHEC" or "the Department"), to issue permit coverage under the National Pollutant Discharge Elimination System ("NPDES") General Permit for Storm Water Discharges from Large and Small Construction Activities. Based on the testimony, evidence, and legal arguments presented at the contested case hearing, I affirm the Department's decision

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to issue permit coverage to Respondent Deertrack Golf, Inc. authorizing redevelopment of the property known as the Old South Golf Course (also referred to herein as the "Old South Course" or "South Course.")

### **Background**

Respondent Deertrack Golf, Inc., ("Deertrack") is the record owner of real property located in Horry County, South Carolina, known as the Old South Golf Course, consisting of approximately 158 acres. Deertrack decided to sell the Old South Course and offered the property for sale and on September 2, 2005, Intervenor Bill Clark Homes of Myrtle Beach, LLC, ("Bill Clark Homes") entered into a contract to purchase the Old South Course. The contract included a condition that the Seller cease golf play on the course. Bill Clark Homes has designed a residential subdivision to be constructed within the acreage known as Phase I of the Old South Golf Course. Bill Clark Homes has obtained approval from Horry County for this subdivision consisting of 278 lots. The Old South Course is contiguous to the development known as Deerfield Plantation Phase II B. Petitioner filed this contested case on behalf of the residents of Phase II B who are opposed to redevelopment of the Old South Course.

Redevelopment of the Old South Course triggered the requirement for a land disturbance and stormwater management permit. DHEC has developed a General Permit known as the NPDES General Permit for Storm Water Discharges from Large and Small Construction Activities ("the General Permit"). DHEC administers the NPDES General Permit for Storm Water Discharges under 24 S.C. Code Ann. Reg. 61-9.122.26 et seq. (Supp. 2007) and 26 S.C. Code Ann. Reg. 72-300 et seq. Since the proposed activity is located within one of the eight coastal counties that comprise the State's coastal zone, the Department's Office of Ocean and

Coastal Resource Management ("OCRM") reviews the project to determine consistency with the Policies and Procedures of the South Carolina Coastal Management Program ("CMP").

Respondent submitted its application, known as a Notice of Intent ("NOI"), seeking coverage under the General Permit on March 5, 2007. The application was deemed to be complete on April 30, 2007. Pet. Exh. 3. The application triggered significant opposition from landowners surrounding the golf course, and OCRM conducted a public hearing to receive comments regarding the application in July of 2007. OCRM provided its Coastal Zone Consistency Certification on February 29, 2008, and the Department authorized coverage under the General Permit on February 29, 2008. Pet. Exh. 1, 2, Resp. Exh. 31.

Petitioner challenges the Department's authorization of permit coverage based on the following grounds as set forth in the Amended Pre-hearing Statement:

1. Are there existing waters of the state and wetlands on the site of the proposed development?
2. Are the waters of the state and wetlands on the site connected to navigable waters of the United States by surface connections, and are the wetlands thus federal jurisdictional wetlands?
3. Did the permit application erroneously state that there are no waters of the state or wetlands on the site?
4. Did DHEC issue the certification and permit without making a proper determination of the presence of waters of the state or wetlands on the property?
5. Will the proposed development exacerbate the existing flooding problems within Deerfield Plantation?

6. Does the proposed stormwater management system for the proposed development properly assess the overall drainage area that will be impacted by the proposed development?
7. Will the proposed development permanently alter wetlands in violation of the South Carolina Coastal Management Program?
8. Will the project restrict or limit the continued use of a recreation open area or disrupt the environmental or aesthetic character of the area?
9. Are there feasible alternatives to the proposed development?
10. Does the proposed stormwater management plan comply with the applicable statutes and regulations?
11. Does the proposed stormwater management plan violate the Pollution Control Act by making discharges of stormwater and pollutants into waters of the state without pretreatment and buffers?
12. Are the ponds, lakes and channels on the subject property "waters of the State?"
13. If the downstream waters are waters of the State, what is the boundary line for the end point of these waters of the State?

### **FINDINGS OF FACT**

Having observed the witnesses and reviewed the evidence and testimony presented at the contested case hearing, and taking into account the burden of proof, I make the following Findings of Fact by a preponderance of the evidence:

1. Respondent Deertrack is the owner of the Old South Golf Course. Based on review of historical aerial photography it appears that construction of the Old South Course was completed by 1982. Tr. v. 3 p. 68 l. 1-20.



2. The Petitioner's members are residents of Phase II B of Deerfield Plantation, which was platted and recorded in 1978. Pet. Exh. 9. Phase II B consists of 124 lots. Tr. v. 1 p. 34 l. 3-6.

3. Intervenor Bill Clark Homes is a land development company that has developed more than one thousand multiple family units and more than two thousand single-family units in the Myrtle Beach area. Tr. v. 2 p. 278. Jeff Farrell is the Division President of Bill Clark Homes of Myrtle Beach and has held that position since 1997. Tr. v. 2. p. 275.

4. Farrell became interested in 2005 in the purchase of the Old South Course for redevelopment. Tr. v. 2 p. 278. Farrell met with staff from the Horry County Planning and Zoning departments to determine whether there were any impediments to redevelopment of the Old South Golf Course. He learned that the area surrounding the course, which includes homes and lots in the Phase II B development, had experienced flooding. Tr. v. 2. p. 280.

5. On at least 15 occasions, Farrell met with the residents of Phase II B and discussed their concerns regarding the potential for flooding. Tr. v. 2. p. 283. Farrell retained the services of a local engineering firm, Engineering Technical Services, Inc. ("ETS") to assist Bill Clark Homes in designing a subdivision for the Old South Golf Course, including the design of a stormwater management plan that would satisfy both the Department's and Horry County's requirements.<sup>1</sup> ETS was specifically instructed to insure that their design did not exacerbate the potential for flooding properties located in Phase II B. When the subdivision plan was completed, Farrell organized a meeting with the residents, County staff, and ETS to review the subdivision plan. Farrell offered to pay for an independent engineer to confirm ETS' work and

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<sup>1</sup> Respondents Deertrack Golf and Bill Clark Homes were required to satisfy State regulatory requirements related to stormwater discharges and the Horry County stormwater ordinance. The Horry County stormwater ordinance has more stringent design requirements than the State regulation because Horry County requires an applicant to design for a less frequent storm event – the 25 year storm.

their predictions that redevelopment of the Old South Golf Course would not exacerbate or increase the potential for flooding of properties in Phase II B. Residents and representatives of Phase II B did not accept his offer. Tr. v. 2. p. 293.

6. Bill Clark Homes is currently under contract with Deertrack Golf, Inc. with an option to purchase Phases I, II, and III of the South Course. Tr. v. 2. p. 300. Phase I consists of approximately 85 acres. ETS designed a residential subdivision consisting of 278 single family lots in Phase I. Resp. Exh. 31 p. 1.

7. The property is currently zoned R-7, which allows for a maximum of seven units per acre. Tr. v. 2 p. 294 l. 24-25, p. 295, l. 1-17. The subdivision plans for Phase I reflect a density of slightly over three units per acre. p. 295, l. 6-7.

8. The Old South Course is depicted on the subdivision plat for Deerfield Plantation Phase II B, prepared in 1978 and revised and recorded in 1979. The plat includes the following notation: "All streets, easements and golf course area shown on the plat are private and are not intended for public use." Pet. Exh. 9, Tr. v. 1 p. 142 ll.22-25.

#### **Coastal Zone Consistency Review**

9. The practice of OCRM is to require applicants for stormwater permits to provide a delineation of the extent of wetlands on the project site and to have this delineation verified by the U.S. Army Corps of Engineers ("the Corps"). While the Corps does not exert jurisdiction over all wetlands, only those satisfying certain interstate commerce requirements, it typically reviews and approves delineations of all wetlands on a site so as to determine the extent of its own jurisdiction. Tr. v.3, p. 160-163.

10. The engineer preparing a stormwater permit application submits the findings of the Corps to OCRM for the purpose of confirming the extent of all wetlands on the site. Tr. v.

3, p. 160-163. If there are wetlands on the site, OCRM applies its CMP policies related to wetlands in evaluating the application. Pet. Exh. 85, p. 15-16.

11. Petitioner argues that there are wetlands on the site which will be disturbed by the permitted activity and that the CMP policies require consideration of those impacts before OCRM may issue a stormwater permit. Specifically, Petitioner cites the policies contained at pages III-14 thru 17 and 73 of the CMP and the mitigation provisions of the refinements to the CMP. Pet. Amended Pre-Hearing Statement.

12. The CMP was published in the State Register in October 1978 pursuant to a requirement of the Coastal Zone Management Act, S.C. Code Ann. §48-39-80. It is not published in the S. C. Code of Regulations and was not promulgated as a regulation. It contains, in addition to the policies cited by Petitioner, descriptions of various parts of the coastal environment, but does not contain a specific definition of wetlands.<sup>2</sup>

13. All parties concede that there is only one method generally accepted and used to determine whether a site is a wetland. That method is set forth in a manual published by the Corps' Waterways Experiment Station in 1987 and referred to as the "'87 manual." The '87 Manual "describes technical guidelines and methods using a multiparameter approach to identify and delineate wetlands." Exh. 1 to Int. Exh. 1. The '87 Manual is not a federal regulation, but a technical document adopted for use by the Corps in delineating areas meeting the federal definition of wetlands set forth in Corps regulations at 33 C.F.R. Part 320, et seq.:

...those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil

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<sup>2</sup> The regulations governing water pollution control permits at Reg. 61-9.122.2 include a definition of wetlands which is identical to the definition set forth in federal regulations. These regulations do not, however, set forth any requirements with respect to application of the NPDES General Permit if wetlands are present on a site where land clearing and construction activity is proposed.

conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Exh. 1 to Int. Exh. 1, p. 9, para. 26.a.

14. While the manual was designed by the Corps for use in identifying wetland areas subject to its jurisdiction pursuant to Section 404 of the federal Clean Water Act, 33 U.S.C. § 1344, in the absence of any method for identifying wetlands adopted by DHEC or OCRM, it is a method accepted by OCRM for determining the existence of wetlands it asserts are subject to the CMP policies. Both witnesses offered as experts in wetland identification testified they used the manual to perform their assessment of the site. Int. Exh. 1, p. 5-8; Pet. Exh. 84, p. 9, 20 and Tr. v. 2, p. 235.

15. The '87 Manual requires that three indicators of a wetland condition – called parameters – be found on any site before land may be classified as wetland: hydric soils, hydrophytic vegetation and wetland hydrology. Exh. 1 to Int. Exh. 1, p. 9-10.

16. Hydric soils are those soils formed over time in conditions of periodic inundation. Inundation of the soil by water to a sufficient extent causes the soil to display characteristics consistent with anaerobic conditions. Exh. 1 to Int. Exh.1, p. 20.

17. The site must also support a prevalence of vegetation adapted for life in saturated soil conditions – called hydrophytic vegetation. The '87 Manual provides for classification of vegetation according to the degree of the relationship between the presence of a specific plant and saturated soil conditions. Obligate plants typically are nearly always found in saturated soil. Facultative plants are sometimes found in saturated soils and sometimes not. Upland plants are typically not found in saturated soils. Exh. 1 to Int. Exh.1, p. 12; Int. Exh. 1, p. 9-14.

18. Finally, a site must have wetland hydrology, regardless of the other two parameters in order to be classified as a wetland. Exh. 1 to Int. Exh. 1, p. 28. Water need not be present at or over the surface of the land, but it must be within ten inches of the surface for

several weeks in the growing season for the hydrology parameter to be satisfied. Int. Exh. 1, p. 21-22. The '87 Manual lists a number of indicators of wetland hydrology including stream gauge data, visual observation of inundation, visual observation of soil saturation, and various physical marks caused by inundation. Exh. 1 to Int. Exh. 1, p. 30-34.

19. The '87 Manual requires that the wetland condition meeting the standards set forth for the three parameters reflect the "normal circumstances" of the site. Exh. 1 to Int. Exh. 1, p. 4, 6. Where a site has been recently altered so that one or more of the parameters has been removed, the '87 Manual provides for a method referred to as the "Atypical Method." This method set out at page 73 of the '87 Manual permits reliance on other parameters in the absence of the parameter which has been removed. Where, however, the altered condition of the site is not the result of unlawful activity, has been in existence for many years and has become the normal circumstances of the site – which is to say, the permanent condition of the site – this method is not sanctioned by the '87 Manual. In such situations, all three parameters must be present for a site to be classified as a wetland. Int. Exh. 1, p. 31-32. The '87 Manual specifically prohibits use of the Atypical Method where a site has been altered – drained, for instance – lawfully. Exh. 1 to Int. Exh. 1, p. 74, para. 71 a.

20. Prior to applying for a stormwater permit, Bill Clark Homes retained through its engineer a wetlands consultant, Norman Boatwright, to perform a wetlands delineation of the site. Tr. v. 3, p. 160-163. Boatwright holds a degree in forestry and has performed wetland delineations since 1991 and has done by his estimate between 60 and 100 per year since that time. His work has been primarily in the Carolinas and Georgia, although he has worked in other parts of the country as well. He has been qualified as an expert in wetlands delineation by the Court of Common Pleas in Horry County. Int. Exh. 1, p.3-5, 32-33. The Court finds that Mr.

Boatwright is an expert qualified to render an opinion as to whether a site meets the criteria for delineation as a wetland pursuant to the '87 Manual.

21. Boatwright spent one day at the site in the early winter of 2006. Int. Exh. 1 p. 15-16. He used a golf cart to traverse the entire property. At the time the site was an active golf course. Boatwright testified he sampled the soil in some 100 places across the property using a hand auger with which he dug holes up to 3 to 4 feet deep. Int. Exh. 1 p. 16, 20. He found no water in any of these holes. Int. Exh. 1 p. 20-21. Boatwright did not find a prevalence of wetland vegetation at any location on the property. He did, however, find that the natural soils across the site (often below a significant amount of earthen fill) were those typically associated with historic flooding. Int. Exh. 1, p. 17-20, 64.

22. Boatwright noted the presence of the many ponds on the site, which he observed to be collecting stormwater from the site for use as irrigation of the golf course. He observed that in creating the golf course the site had been significantly altered in terms of its surface features and in terms of the displacement of the natural hydrology of the site. The pond and ditch system, in his opinion, had fundamentally altered the hydrology of the site. Int. Exh. 1, p. 21-22, 36, 38-39, 61, 66.

23. Boatwright explained that the '87 Manual addresses sites like the one he described as fundamentally altered. Where the hydrology of a site has been altered artificially for a significant period of time, he testified that the manual does not permit determination of hydrology by the use of soils and vegetation alone. Use of soils and vegetation as "secondary" indicators of hydrology is only appropriate at a disturbed site, he explained, if the site has only been recently disturbed. He testified that there is no part of this site which possesses the requisite hydrology to qualify for delineation as a wetland, including the one small site where

Petitioner's wetlands expert testified he performed a wetlands determination. Int. Exh. 1, p. 14, 31-32, 60-61.

24. Boatwright testified that in his opinion no part of the project site is a wetland. The site consists in his opinion of upland intersected with some drainage ditches and drainage ponds. Int. Exh. 1, p. 36, 61, 64, 66. Boatwright reported his conclusions to the Corps, and the Corps provided him a letter certifying that there were no wetlands on the site. Based on this letter from the Corps, which was attached to the application to OCRM, ETS completed the application for the stormwater permit and coverage under the General Permit by indicating there were no wetlands on the site. Tr. v. 3, p. 160-163; Pet. Exh. 84, p. 17-18.

25. Petitioner offered the testimony of Jake Duncan, a former Corps of Engineers employee and since 2002 a private consultant performing wetland delineations. This Court finds that Mr. Duncan is an expert qualified to render an opinion as to whether a site meets the criteria for delineation as a wetland pursuant to the '87 Manual. Tr. v. 2, p. 188-189.

26. Duncan visited the site on two occasions, once on August 20, 2008 and again on December 4, 2008. Pet. Exh. 83.

27. During his visit in August 2008, Duncan was hired to examine the site and to "determine whether or not this was a wetland," and he made no determinations that any part of the site was currently a wetland. Pet Exh. 84, p. 18, 29. At that time, his evaluation led him to the conclusion that the site of the golf course and at least some part of each of the ponds on the course had been a wetland defined by the '87 Manual prior to construction of the golf course. He based this conclusion primarily on what he determined to have been the natural soils on the site. Like Boatwright, he explained that the site had been substantially disturbed by excavation and deposit in many cases of soil on top of the natural soils. Tr. v. 2, p. 232-233. In some cases,

he said the fill was too deep for him to measure with his auger without extensions. Pet. Exh. 84, p. 26-27. He also noted some wetland vegetation existing in non-wetland areas, which he believed to be left from the time prior to construction of the golf course. Duncan, Tr. v. 2, p. 217-218.

28. Immediately after his deposition was taken, Duncan was asked by Petitioner's counsel to return to the site. He did so on December 4, 2008 and produced a letter report of his findings on January 13, 2009. Pet. Exh. 83.

29. Duncan's January 13, 2009 letter essentially repeats the conclusions he set out in his original report and in his deposition testimony with one exception. He testified that he made a wetland "determination" of one spot which he marked with a star on an infrared photograph attached to his letter. Duncan testified that at this site he found a prevalence of wetland vegetation, including a swamp tupelo, and wetland soils. He did not say in his letter report or in his testimony at the hearing that he found wetland hydrology, other than as might be indicated by the vegetation and soils. He did not provide any demarcation of the boundaries he believed to be a wetland. Pet. Exh. 83. During his first visit in August 2008, Duncan explained that he made no determination of the presence of wetland hydrology. Pet. Exh. 84, p. 29. He testified at his deposition that he was not saying there were wetlands on the property "today" and that all three parameters would need to be present to make such a finding. Pet. Exh. 84, p. 35.

30. Duncan's testimony concerning the "star area" referenced in his January 13, 2009 letter is the only evidence submitted by Petitioner and admitted into the record of the existence of wetlands on the project site. The Court does not find this evidence persuasive. First, Duncan's extensive reports and testimony prior to this post-deposition visit to the site are devoid of any mention of current wetland conditions on the site. Pet. Exh. 84. The Court cannot help but



question why his extensive first visit, all for the purpose of making a wetland evaluation, failed to alert him to the presence of wetlands. Second, his claim that a part of the site indicated only by a roughly drawn “star” on an infrared photograph is insufficient to describe the extent of area he is claiming to be currently a wetland and for that reason alone is not sufficient as evidence on which this Court can rely. Third, Boatwright’s testimony, which this Court finds to be equally as credible, directly contradicts Duncan’s conclusions as to the type of vegetation and the presence of wetland hydrology. For instance, Boatwright testified that he evaluated the exact spot indicated by Duncan’s “star” and found a predominance of upland vegetation, specifically loblolly pines, which he explained showed up on the infrared photo itself, and no swamp tupelo. Int. Exh. 1, p. 28-31, 63-64. Fourth, Duncan failed to rebut Boatwright’s testimony that the ‘87 Manual does not permit conclusions concerning wetland hydrology like those offered by Duncan, using only soils and plants on a site which has been as altered as long as this one. Int. Exh. 1, p. 31-32. Boatwright’s opinion on this point is also more consistent with the actual wording of the ‘87 Manual concerning use of the Atypical Method. Exh. 1 to Int. Exh. 1, p. 73-74.<sup>3</sup> At a minimum, this Court must conclude that Petitioner has failed to carry their burden of proof as to the presence of any wetlands on any part of the project site.

### **Waters of the State**

31. In its Amended Pre-Hearing Statement, Petitioner framed the issues before this Court as: 1) whether the ponds on the Old South Golf Course are “waters of the state” as that

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<sup>3</sup> The Court also finds Mr. Duncan’s testimony on applicability of the Atypical Method to this site contradictory. On the one hand, like Mr. Boatwright, he testified that the site had been fundamentally altered through filling and grading so as to create the golf course decades ago (Pet. Exh. 84, p. 22-23) and that were he to evaluate whether wetlands were on the site, all three parameters need to present (Pet. Exh. 84, p. 35). On the other hand, he testified that it was appropriate to use the Atypical Method, as he apparently did when he visited the “star area” during his December 2008 visit and to conclude that wetland hydrology was present using only soil and vegetation indicators. (Pet. Exh. 84, p. 22-23). His explanation that this was appropriate because, in his opinion, the Corps should have been applying the ‘87 Manual to delineate wetlands years before it existed is not persuasive to this Court. (Pet. Exh. 84, p. 22-40).

term is defined in Reg. 61-9.122.2; and, 2) whether the proposed storm water management plan violates the Pollution Control Act with discharges of storm waters and pollutants into waters of the state without pretreatment and buffers. Petitioner did not identify in its Amended Pre-Hearing Statement, or at the contested case hearing, what specific regulatory requirement(s) would be triggered if the ponds were considered to be waters of the state.

32. 24 S. C. Code Ann. Reg. 61-9.122.2(b), defines "waters of the state" as:

...lakes, bays, sounds, ponds, impounded reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic Ocean within the territorial limits of the State, and all other bodies of surface or underground water, natural or artificial, public or private, inland or coastal, fresh or salt, which are wholly or partially within or bordering the State or within its jurisdiction. (emphasis added)

33. Petitioner offered into evidence portions of the deposition testimony of Shannon Hicks, a civil engineer and Manager of the Storm Water and State Certification Section of OCRM. Hicks testified that the plans submitted by Bill Clark Homes depicted the existing golf course ponds. Pet. Exh. 85 p. 8 l. 2-9. Hicks acknowledged that a "strict reading" of the definition of "waters of the state" would encompass these golf course ponds. Pet. Exh. 85 p. 10 l. 5-6. Hicks further testified that "during this review" the golf course ponds were not considered to be waters of the state. Hicks testified that the ponds on site, "appeared that they were constructed for the golf course. So that's what I utilized during the review, my understanding at the time." Pet. Exh. 85, p. 9. l. 15-18. When asked if OCRM's review of the project would have been affected in any way "if the ponds were considered waters of the state," Hicks replied, "[I]t may change it, but during this review they weren't considered waters of the state." Pet. Exh. 85, p. 15 l. 6-7. She went on to explain that the significance of the "water of the State" designation is that if storm water flows into a "water of the state," a pretreatment mechanism must be implemented." Pet. Exh. 85, p. 17. l. 5-7.

34. All witnesses who testified at the Hearing, including Petitioner's expert civil engineer, characterized the ponds on the Old South Golf Course as stormwater ponds. Tr. v. 2, p. 115 l. 18-21; Tr. v. 3, p. 65-67, 96-98; Int. Ex. 1, p. 21-22, 38-39. Hicks testified that "some ponds" would be incorporated into the new stormwater plan. Pet. Ex. 85, p. 17 l. 12-13.

35. It is not disputed that the ponds on the Old South Course are stormwater ponds, also alternatively referred to in the testimony as "drainage ponds," "retention ponds," or "detention ponds." Such ponds are the predominant method for controlling stormwater runoff associated with development. These ponds collect stormwater, hold it for a time to allow sediments to settle out, and then release the water in a controlled fashion. Tr. v. 2, p. 115; Tr. v. 3, p. 96-98; Int. Exh. 1, p. 21-22, 38-39.

36. This court is cognizant of the breadth of the regulatory definition set forth in Reg. 61-9.122.2(b), which appears to derive from the statutory definition of "waters" contained in the S. C. Pollution Control Act: "...lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic Ocean within the territorial limits of the State and all other bodies of surface or underground water, natural or artificial, public or private, inland or coastal, fresh or salt, which are wholly or partially within or bordering the State or within its jurisdiction." S. C. Code Ann. §48-1-10(2). This Court agrees with the OCRM staff's conclusion that a strict reading of this definition encompasses the existing golf course ponds on the Old South Course.

37. The origin of the "pre-treatment requirements" referenced in Ms. Hicks' testimony, while not specifically identified by OCRM or by Petitioner, appears to be 25 S. C. Code Ann. Reg. 61-68, Water Classifications & Standards, which includes the following "General Rules and Standards Applicable to all Waters": "[a]ny discharge into waters of the

State must be permitted by the Department and receive a degree of treatment and/or control which shall produce an effluent which is consistent with the Act, the Clean Water Act ... this regulation, and related regulations.” 25 S. C. Code Ann. Reg. 61-68(E)(4)(a).

38. Ultimately this matter is determined based on the rules of statutory and regulatory construction. Reg. 61-68(E) states, on its face, that it is intended to be a regulation of general applicability. A requirement of general applicability must be read in concert with specific regulatory requirements. “A specific statutory provision prevails over a more general one.” Atlas Food Systems & Serv., Inc., v. Crane, 319 S. C. 556, 462 S.E.2d 858 (1995). 26 S. C. Code Ann. Reg. 72-300 et seq. and 24 S. C. Code Ann. Reg. 61-9.122.26 are specifically applicable to stormwater discharges. In accordance with 26 S. C. Code Ann. Reg. 72-301(11) a “detention structure” is a structure that stores and controls stormwater runoff. It is undisputed that the stormwater ponds located on the South Course are detention ponds. Reg. 72-305(B)(3) and (B)(5) refer specifically to the construction of ponds to achieve water quality improvement. Reg. 72-307(C)(5) sets forth specific design requirements for ponds “used for water quality protection.” and for “permanent water quality ponds.”

39. In accordance with S. C. Code Ann. Reg. 61-9.122.26, a stormwater discharge associated with “construction activity including clearing, grading, and excavation” of an area greater than 5 acres is classified as a “stormwater discharge associated with industrial activity.” Reg. 122.26(b)(14). Reg. 61-9.122.26(c)(ii) sets forth the requirements for obtaining permit coverage, which include providing information as to the “proposed measures to control pollutants in stormwater discharges during construction” and “after construction.” These measures include the use of ponds or detention structures, as is evident in the General Permit which refers specifically to the construction of “sediment basins” to store stormwater runoff.

Pet. Ex. 12 p. 23. A "storm water retention pond" is identified as a Best Management Practice ("BMP") in the General Permit. Pet Ex. 12 p. 32.

40. Consequently, and consistent with the rules of statutory construction, the specific regulations governing the construction and use of stormwater ponds as a method of controlling water quantity and water quality in stormwater runoff prevail over those rules generally applicable to all waters of the State.

### **Historic Drainage Concerns**

41. Frank Yelinko is a resident of Deerfield Plantation at Lot 539, 1022 Plantation Drive and is President of the Deerfield Plantation Phase II B Homeowners Association. Tr. v. 1 p. 11 ll.3-21. Yelinko has resided at 1022 Plantation Drive since 1995. He is presently retired and does not hold any professional licenses in the State of South Carolina. Tr. v. 1 p. 120 ll. 13-17. This Court considers Mr. Yelinko to be an expert in commercial and subdivision land development based on his work experience prior to his relocation to South Carolina. Tr. v. 1 p. 128 ll. 3-12.

42. Yelinko's lot is located immediately adjacent to the Old South Course. Since 1995 he has observed four major floods, which he defined as a rain event where water would flood homes in the subdivision, and approximately eight minor floods, where some of the residents would experience flooding in their garages, within Deerfield Plantation Phase II B. Tr. v. 1 p. 73 ll. 6-25. According to Yelinko, Petitioner's chief concern and the basis for objection to redevelopment of the South Course is the potential for increased flooding resulting from the redevelopment. Tr. v. 1 p. 94 ll. 23-25; p. 95 ll. 15-18.<sup>4</sup>

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<sup>4</sup> A representative of Deerfield Golf, Inc., Jason Murphy, testified that he met with representatives of Deerfield Plantation Phase II B POA to discuss redevelopment of the Old South Course. At that meeting, the POA and Mr.

43. In 1997, twenty-two lots in Phase II B flooded, but in most instances the garages were the only portions of the houses that became inundated with water. Tr. v. 1 p. 36 l. 19-25.

44. Property owners in Phase II B have not experienced any flooding since 2001. Tr. v. 1 p. 74 l. 1-3.

45. The specific examples of flooding cited by Petitioner's witnesses were limited to impacts to properties located on Circle Drive. Tr. v. 2 p. 24 l. 23; p. 25 l. 9; p. 31 l. 20; p. 55 l. 4; p. 111 l. 10.

46. Mike Taylor resides at 569 Circle Drive. In September of 2000, following Hurricane Floyd<sup>5</sup>, he suffered flooding that impacted his home. Tr. v. 2 p. 149-150. Mr. Taylor observed flooding in his neighbors' homes in March of 2001, at 571 Circle Drive, 572 Circle Drive, and 568 Circle Drive. Tr. v. 2 p. 154 l. 9-12. Mike Couture resides at 570 Circle Drive. His home flooded during Hurricane Floyd and in 2001. Tr. v. 2 p. 259 l. 19-25; p. 260 l. 1-23. Couture confirmed that there have been no flooding events affecting Circle Drive properties in the past six years. Tr. v. 2 p. 262 l. 25, p. 263 l. 1-2.

47. Many residences on Circle Drive are slab on grade construction and are located at elevations below the elevation of Circle Drive. Tr. v. 1 p. 195 l. 8-13.

48. Stormwater run-off drains from Deerfield Plantation Phase II B into a series of drainage ponds constructed on the golf course, and from the ponds into a channel leading out of

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Yelinko, expressed additional objections to redevelopment, including a request that the golf course be dedicated to public use. Tr. v.3 p. 178-179.

<sup>5</sup> Hurricane Floyd formed off the coast of Africa and lasted from September 7 to September 19, 2000, peaking in strength as a very strong Category 4 hurricane. It was among the largest Atlantic hurricanes of its strength ever recorded. The hurricane produced torrential rainfall in eastern North Carolina. The rains caused widespread flooding over a period of several weeks; nearly every river basin in the eastern part of the state exceeded 500-year flood levels. In total, Floyd was responsible for 57 fatalities and \$4.5 billion in damage. (www.nhc.noaa.gov)

the development. The discharge is then piped under U. S. Highway 17, where it flows into another pond, and is then released into Lake Elizabeth, and then Lake Dogwood, and finally into the Atlantic Ocean. Tr. v.1 p. 43, p. 68-69.

49. Lake Elizabeth and Lake Dogwood are large lakes located in the Town of Surfside Beach adjacent to the Atlantic Ocean. Pet. Exh. 14, 73, 74.

50. Tom Garigen, the Stormwater Manager for Horry County, testified on behalf of Respondent Deertrack Golf, Inc. Garigen oversees implementation of the County's stormwater management ordinance which was adopted in 2000. In addition to implementing the stormwater management ordinance and permitting program, Garigen also oversees the coordination of drainage improvement projects and capital improvement projects related to the County's stormwater systems. Tr. v. 3 p. 7. Garigen's responsibilities include extensive field work and investigation, and he is familiar with the Old South Golf Course, the surrounding development, and the proposed redevelopment. Tr. v. 3 p. 10 l. 24-25; p. 11 l. 1-18.

51. According to Garigen, Deerfield Plantation Phase II B was developed in a low-lying area prior to the current regulatory requirements and there were also inadequacies in the downstream drainage system that contributed to the historic flooding problems. Tr. v. 3 p. 19.

52. Horry County responded to the historic flooding problems in the Deerfield Plantation Phase II B subdivision by hiring an engineering firm, the LPA Group in Columbia, South Carolina to study the drainage issues. LPA prepared an initial report, which was updated twice for the County, to reflect changes in the watershed. Tr. v. 3 p. 11 l. 12-25, p. 12 l. 1-16. Resp. Exh. 8, 18, 26.

53. LPA identified the outfall from Deerfield Plantation Phase II B as Node 27. LPA modeled existing conditions at Node 27 in its initial report in 2000 and predicted the peak water

surface elevation during the 25 year storm event to be 24.67. Resp. Exh. 26; Tr. v. 3 p. 21 l. 13-18. This is the most significant prediction in the LPA report for purposes of designing a stormwater management plan for redevelopment of the South Course because it reflects the tailwater condition at the point where the drainage from the Deerfield residential development and the golf course tie in to the County's drainage system. Tr. v. 3 p. 91 l. 4-10. This tailwater condition can be incorporated into stormwater models for new developments that discharge into Node 27 to insure that at peak conditions water from the new development will still flow out of the development. Tr. v. 3 p. 95 l. 2-13.

54. The LPA report set forth three alternatives, which would improve drainage in the watershed. Alternative 1 proposed the construction of detention ponds at various locations upstream of Highway 17 and culvert replacements in the Caropines subdivision and along Glenns Bay Road. Alternative 1 was the most costly as it would have required substantial land acquisition. Alternative 2 proposed major piping upgrades upstream of Lake Elizabeth, improvements in the Town of Surfside Beach and an acre of additional storage upstream of Glenns Bay Road. Alternative 3 was a combination of the first two alternatives with less proposed land acquisition. Resp. Exh. 26, Tr. v.3 p. 22-23.

55. Horry County implemented Alternative 2 in 2001, immediately following the submission of the LPA study. Tr. v.3 p. 23. Initially, the County installed an additional 42" pipe culvert under Glenns Bay Road

56. More recently, the County installed a dual culvert system consisting of two 60" pipes leading out to and under Highway 17 Business. The pipe under Highway 17 was increased to 72". Horry County acquired property in the vicinity of Node 27 to construct an additional detention pond. Resp. Exh. 9, 28, Tr. v. 3 p. 24 l. 3-7, p. 34 l. 16-25, p. 35 l. 1-25.



57. Petitioner claims that the County's improvements are defective based on the installation of a screening structure at the headwaters of the dual culvert system and based on the fact that of the dual 60" pipes intersect with a gravity sewer line. Tr. v. 2 p. 102 l. 16-25. The County did install a screening system at the point where the pipes discharge into a drainage basin that flows into Lake Elizabeth and Lake Dogwood. Tr. v.3 p. 24. As Garigen explained, the original screening structure accumulated so much trash that it blocked the water flow, so the County redesigned it. Tr. v. 3 p. 32 l. 14-25; p. 33 l. 1-12; Resp. Exh. 21a, b. Garigen testified that the redesign has been successful and has eliminated the potential for accumulation and obstruction of water flow. Tr. v. 3 p. 33 l. 17-21. Garigen also confirmed that the dual 60" pipes intersect with a gravity sewer line. In order to insure that the flow from the dual 60" pipes is not blocked or impeded by the sewer line, the County installed a conflict box, 14' x 8' x 7', described by Garigen as being the size of a "small room" which allows water to flow above and below the gravity sewer line. Tr. v.3 p. 30-31, Resp. Exh. 27.

58. Garigen testified that he is the Horry County staff person contacted regarding reports of flooding and flooding complaints from County residents, and there have been no reports of flooding in homes in Deerfield Plantation Phase II B since 2001. Tr. v.3. p. 30. The last significant rain event in Horry County, prior to the contested case hearing, occurred in October of 2008. This rain event resulted in an accumulation of approximately 4 inches of rain in a short period of time. Tr. v. 3 p. 36 l. 22-23. No flooding was reported.

59. In October of 2007, LPA revised its report of April, 2000 to reflect the initial improvements installed by Horry County. In its October, 2007 report, LPA predicted a lower peak water surface elevation at Node 27 following a 25 year storm event of 21.38. Resp. Exh. 8.

60. LPA's October 2007 report was revised in July of 2008 to reflect installation of the dual 60" pipes and the new pond at Node 27, and to reflect the development proposed by Deerfield Golf and Bill Clark Homes. LPA predicted a peak water surface elevation following the 25 year storm event of 20.64 at Node 27 as a result of the improvements.

61. Following the significant rain event in October of 2008, Garigen inspected the pond at the headwaters of the dual 60" pipes to determine the water surface elevation at Node 27. The debris marks left on the screen provided visible evidence that the water surface elevation was raised to approximately 20 feet, considerably down from the LPA predictions of 24.67 in 2000, and consistent with LPA's predictions in 2007 and 2008.<sup>6</sup>

62. Horry County has spent over two million dollars in improving drainage infrastructure in order to address the flooding problems in Deerfield Plantation Phase II B.

63. The LPA Group was hired to address flooding in both the Deerfield development and in an adjacent development known as Caropines. Garigen testified that the drainage improvements have also resulted in alleviating the flooding problems in Caropines. Tr. v. 3 p. 42 l. 4-5.

64. In addition to OCRM's review, Horry County conducted their own review of the stormwater design for the project. Horry County requires that a new development be designed to insure that post-development peak discharge rates do not exceed pre-development peak discharge rates for the 25 year storm event. Tr. v. 3 p. 13. Garigen testified that his staff has spent more time reviewing the stormwater management design and calculations for redevelopment of the South Course than they have spent on any other project they have

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<sup>6</sup> Garigen described the accumulation of rain as "four inches ... over a fairly short period of time." Tr. v. 3 p. 36 l. 22-23. Petitioner's counsel and witnesses disputed whether Deerfield Phase II B experienced a significant rain event in October of 2008, but Garigen's inspection of the screening device at the location of Node 27 indicates that stormwater flowed into Node 27. Garigen estimated that the water elevation in the pond rose from its normal levels of 15.5 feet to 20 feet within two hours. Tr. v. 3 p. 49 l. 15-17, p. 51 l. 21-25, p. 52 l. 1-8.

reviewed. The reason for the level of review, aside from the scrutiny of the surrounding property owners, was the County's investment in stormwater infrastructure in the drainage area, and its desire to insure that future development approvals are consistent with the County's investment of resources. Tr. v. 3 p. 38 l. 20-25, p. 39 l. 1-15.

### **Project Design**

65. Thomas Bevins is a professional engineer with the firm Engineering and Technical Services, Inc. ("ETS") and has been employed by ETS since 1986. During the past 23 years, Bevins has participated in the design and development of at least 600 residential and commercial development projects, primarily located in Horry and Georgetown Counties. Tr. v. 3 pp. 58-60. He is a licensed professional engineer in South Carolina and North Carolina and testified in this contested case as an expert in the field of civil engineering and stormwater management. Tr. v. 3 p. 63.

66. Bevins has designed golf courses and incorporated golf course ponds into his design. Tr. v. 3 p. 60. According to Bevins, golf course ponds typically serve as part of a stormwater drainage system for the golf course and, sometimes, for adjacent residential development. Tr. v. 3 p. 65, l. 15-25, p. 66 l. 11-9.

67. The requirements for redevelopment of the Old South Course were unique. ETS was required to model for projected stormwater flows from the new residential subdivision it had designed, and for actual flows from the existing development. Tr. v.3 p. 64 l. 14-25, p. 65 l. 1-4.

68. The LPA reports established a watershed described by Bevins as the "Lake Elizabeth and Lake Dogwood drainage watershed." This watershed is depicted in Figure 7.1 of ETS's Drainage Report, which was submitted to OCRM as part of the request for stormwater

permit coverage. This watershed consists of 1,115 acres. Pet. Exh. 31; Tr. v. 3 p. 76 l. 5-13. ETS's depiction of the watershed is identical to Figure 1-2 of the LPA Report prepared in April, 2000, "Dogwood Lake Watershed." LPA noted in its initial report that the "Dogwood Lake Watershed is approximately 1,115 acres." Resp. Exh. 26.

69. ETS's calculations, however, are based on a subset of the 1,115 acre Dogwood Lake Watershed. ETS identified the portion of the watershed that drains through the Deerfield property and discharges at Node 27. ETS included a depiction of this drainage basin in its report. Resp. Exh. 31 – Figure 6.1. The difference between ETS's drainage basin and LPA's watershed is that all 1,100 acres of LPA's watershed discharge through an outlet downstream of Lake Elizabeth and Lake Dogwood. ETS focused on the contributing drainage area of approximately 864 acres that discharges through Node 27. Tr. v. 3 p. 81 l. 14-25. ETS selected this drainage basin, over the 1,100 acre watershed utilized by LPA, because LPA's watershed discharged downstream of Node 27. ETS's focus was on the condition at Node 27 and on the contribution to that condition attributable to the proposed residential subdivision. Tr. p. 77 l. 22-25, p. 81 l. 14-22.

70. ETS utilizes stormwater models that simulate the performance of a stormwater system and predict how the system will behave during a storm event. Computer models are standard industry tools for use in the design of interconnected pond stormwater systems. Tr. v. 3 p. 89 l. 1-19, p. 86 l. 19-20, p. 90 l. 11-16. In designing Phase I of the redevelopment of the South Course, ETS utilized the computer model known as ICPR, Interconnected Pond Routing System. Tr. v. 3 p. 88 l. 2-9, p. 89 l. 15-19.

71. When ETS prepared its stormwater calculations for purposes of submitting its permit application to DHEC, it incorporated the data contained in the LPA report dated October,

2007. LPA predicted a tailwater condition at Node 27 during the 25 year storm event to be a water surface elevation of 21.38 ft. Resp. Exh. 8 – Analysis of Proposed Changes. ETS utilized a more conservative post-development peak water surface elevation assumption of 22 feet as its assumed worst-case tailwater condition during the 25 year storm event. ETS designed sufficient detention for Phase I of the redevelopment to achieve reductions in post development peak discharge rates. ETS's design included sufficient storage capacity so "the calculated post development peak discharge rates are less than or equal to the pre-development peak flow rates." Resp. Exh. 31 p. 11. Tr. v. 3 p. 93 l. 22-25, p. 94, p. 95 l. 1-13.

72. In addition to meeting the State regulatory standard for the 2 and 10 year storm events, and Horry County's ordinance requiring design for the 25 year storm event, Horry County specifically requested that ETS's design for Phase I of the redevelopment of the South Course incorporate measures to improve conditions for adjacent property owners. Tr. v.3 p. 72 l. 1-11.

73. ETS determined that the existing golf course ponds, which are providing a stormwater detention function for Deerfield Plantation Phase II B, are inefficient. The ponds are shallow and have limited storage capacity. Tr. v. 3 p. 96 l. 12-25, p. 97 l. 1-6. Bevins testified that the flooding in the existing subdivision is, in part, attributable to the limitations in the existing ponds. Tr. v. 3 p. 97 l. 12-19. The redevelopment of the golf course created an opportunity to improve stormwater storage capacity for the residents and properties at Deerfield Plantation Phase II B. Presently there are 11.55 acres of stormwater ponds on the golf course providing stormwater detention for Phase II B, with existing storage capacity of 5.66 acre feet. The plans for redevelopment include 22.36 acres of ponds and 100.62 acre feet of storage capacity resulting in an increase of approximately 90 acre feet in additional storage capacity.

Resp. Exh. 31 p. 12, Exh. 19-a and 19-b. Bevins testified that in his opinion, as an expert in civil engineering with expertise in stormwater management, the proposed new ponds will function better than the existing detention ponds. Tr. v. 3 p. 100 l. 3-7.

74. Along with adding storage and detention capacity by substantially increasing the number of ponds, ETS's design routes stormwater around the properties located on Circle Drive, instead of through those properties. Tr. v. 3 p. 103 l. 9-25, p. 104 l. 1-18, Resp. Exh. 11 a, 11 b, and 11 c. Presently, in the absence of redevelopment of the Old South Course, approximately 100 acres contribute to stormwater run-off through the Circle Drive properties. With the re-routing proposed by ETS, the contributing drainage area impacting Circle Drive is reduced to approximately 10-12 acres. Consequently, redevelopment of the Old South Course results in a 90% reduction in stormwater discharges directly onto Circle Drive. Tr. v. 3 p. 105 l. 1-11. The re-routing was accomplished by intercepting stormwater along the perimeter of the proposed development and discharging it into the ponds. Tr. v. 3 p. 105 l. 18-25. As Bevins testified, "that water will have a route that will go around the Circle Drive area and it will discharge downstream of that particular part of Circle Drive." Tr. v. 3 p. 106 l. 5-8. In Bevins' opinion, re-routing stormwater discharges around Circle Drive will improve the drainage conditions and further eliminate the potential for nuisance flooding on Circle Drive. Tr. v. 3 p. 106 l. 22-23.

75. Petitioner expressed concern over the elevations of the proposed development relative to properties on Circle Drive. Horry County requires that the lowest elevation for roads in the proposed redevelopment be above the peak stage of the 25 year storm event. Tr. v.3 p. 112, l. 20-25. Horry County also requires that the houses be built a foot above the elevation of the centerline of the proposed roads. Bevins testified that in some instances along Circle Drive the existing houses may be at elevations approximately 4 feet lower than the floor elevation of

adjacent houses in the redevelopment. The effect on the existing houses will be that adjoining properties will have structures at higher elevations, affecting the views from existing houses that formerly enjoyed unobstructed views of a golf course. Tr. v. 3 p. 115 l. 23-25. Bevins testified that the construction of new houses adjacent to the homes on Circle Drive at elevations approximately 4 feet higher than the homes on Circle Drive, would not increase the potential for flooding on Circle Drive. Tr. v. 3 p. 118 l. 5-22. Bevins' design includes swales constructed on either side of the building pads, between the new homes. Moreover, as is discussed above, most of the drainage traditionally flowing through Circle Drive will be captured by a series of ditches and pipes located within the new construction, and routed directly to the stormwater management ponds.

76. Petitioner presented the testimony of Steven Powell, a Professional Engineer and owner of Venture Engineering Co. in Conway, S. C. Powell is recognized by this court as an expert in civil engineering and stormwater engineering. Tr. v. 2 p. 8 l. 25. Powell reviewed the permit application prepared by ETS, prior to permit issuance, at the request of an attorney representing residents who opposed the redevelopment. Tr. v. 2 p. 10 l. 2-13. In his initial review, Powell found no problems with ETS's stormwater calculations. Tr. p. 11 l. 2-5. Following his initial review, Powell's opinion was that the redevelopment of the Old South Course could potentially improve drainage conditions for surrounding residents. Tr. v. 2 p. 11 ll. 15-20.

77. After December 3, 2008, the date of Powell's first deposition, Powell was retained by Petitioner to perform additional work related to the ETS permit application and supporting documentation. Powell subsequently concluded that the ETS "watershed" was

insufficient.<sup>7</sup> Powell also concluded that the LPA data was unreliable because it had not been verified and the LPA model had not been calibrated. Powell believes that the anecdotal evidence of flooding along Circle Drive should have been incorporated in the LPA model. Tr. v. 2 p. 22 l. 21-25, p. 23 l. 1-3.

78. Powell illustrated his concern with the lack of calibration by comparing the post development peak discharge rate predicted in the most recent LPA model with the peak elevations witnessed in 2001. Tr. v. 2 p. 31 l. 17-23. However, Powell overlooks the changes in the drainage infrastructure that were installed between 2001 and publication of LPA's 2007 and 2008 revisions. Powell expressed concern that the tailwater conditions utilized by ETS, and developed by LPA, are inaccurate, but Powell admits that he did not perform any independent calculations to derive a more accurate tailwater elevation. Tr. v. 2 p. 14 ll. 21-22. p. 37, l. 1-11. Powell acknowledges that he has "every reason to believe that there probably is more capacity [for stormwater flows] there than there was in 2001." Tr. v. 2 p. 39 l. 4-6. Powell believes, however, that the conflict between the dual 60" pipes and the gravity sewer line will result in a 40% loss of conveyance, or water flow, through the pipe. Tr. v. 2 p. 39 l. 10-25.

79. On cross examination Powell admitted that he had sent an e-mail to the attorney who initially asked him to review the plans and calculations stating that "after studying the report, plans and calculations of ETS for the Old South Course, my conclusion is that drainage will likely be improved for the existing homeowners there. I can find no technical basis, from a stormwater management side, to oppose the issuance of the stormwater permit." Tr. v. 2 p. 64 l. 16-22. Powell qualified this assessment in his testimony: "But remember those calculations were based on the un-calibrated model of LPA. So if LPA's model is not correct, I'm sorry, but

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<sup>7</sup> As is noted herein, ETS selected a drainage basin within the Dogwood Lake watershed. The Dogwood Lake watershed consists of 1,115 acres. The ETS drainage basin within that watershed consists of 864 acres. Tr. v. 2 p. 20 l. 4-5.



ETS's calculations are not either." Tr. v. 2 p. 67 l. 4-8. Powell acknowledged, however, that the LPA report describes the methodology used, which included "[g]ather additional input from the public, Horry County officials, Town of Surfside officials, and site investigations;" and "[c]alibrate the model using information gathered." Pet. Exh. 26 Section 2.0 Methodology. But, according to Powell, "if they gathered the data ... its not reflected in the report." Tr. v. 2 p. 70 l. 20-22. However, the data that Powell believes should have been included in the model was from a flooding event in March of 2001, a year after the publication of the LPA report. Tr. v. 2 p. 55 l. 1-15. In fact, all anecdotal evidence of flooding presented at the contested case hearing, documented with photographs, were of flooding events that occurred after publication of the April 2000 LPA report.<sup>8</sup>

80. This Court understands and appreciates Mr. Powell's concerns that the predictions in the LPA model be based on as much accurate data as possible. However, this Court finds that the LPA model and report is reliable and that it is appropriate for ETS to have utilized assumptions developed by LPA. The most recent flood event described by the Phase II B residents occurred eight years ago, in 2001. This Court does not believe that it is pure coincidence that incidents of flooding ceased at the same time that Horry County began implementing the recommendations of the LPA report. LPA recommended significant, and expensive, infrastructure improvements that have been undertaken by the County. LPA has, in its 2007 and 2008 reports, attempted to calibrate, or at least revise, the model to reflect the installation of the County improvements and the redevelopment plans. This Court cannot overlook Garigen's undisputed testimony that four inches of rain fell in a two hour period in October of 2008, flowed into Node 27, and raised the levels from 15.5 feet to approximately 20

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<sup>8</sup> Mike Taylor testified and provided photographs documenting flooding events that occurred after he purchased his property in February of 2000. Mike Couture testified regarding Hurricane Floyd, in September of 2000, and the flood event in March of 2001.

feet. Although this Court acknowledges that no determination has been made to classify that storm event by frequency<sup>9</sup>, the water level as observed by Garigen is entirely consistent with predictions made by LPA in its July 2008 revised report for peak tailwater conditions at Node 27 for the 10 (20.08 ft.) and 25 (20.64 ft.) year storm event. Resp. Exh. 18 p. 9.

81. Petitioner has the burden of proving that the Respondent failed to meet the requirements of S. C. Code Ann. Reg. 72-300 and 61.9-122. Petitioner has not cited to a specific requirement in either the Standards for Stormwater Management and Sediment Reduction in S. C. Code Reg. 72-300 et seq. or in S. C. Code Reg. 61-9.122.26 governing storm water discharges. Pertinent requirements of S. C. Code Reg. 72-300 are set forth in Reg. 72-307(C)(4) which require an applicant to design for the two and ten year storm events but also gives the Department the discretion to utilize a less frequent storm event “(e.g. 25 year, 24 hour) to address existing or future stormwater quantity or quality problems.” Here, with the historic flooding problems, the County’s focus on and study of the watershed, the nature of this project – redevelopment of a tract formerly utilized as a golf course, and because the golf course served as the stormwater detention system for the adjacent development, this is certainly an instance where the Department should use its discretion and impose requirements based on a less frequent storm event. That was accomplished because of the County’s more stringent requirements.

This Court certainly understands the concerns of the Petitioner’s members. It is undisputed that up until 2001 property owners on Circle Drive were vulnerable to flooding and suffered from flooding and significant property damage. But, it is also undisputed that flooding has not occurred since 2001 and that the cessation of flooding coincides with the County’s implementation of the LPA recommendations. This Court places great weight on the testimony

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<sup>9</sup> Garigen described the October 2008 storm as “so bad because it occurred ... it was thunderstorm related and those happen very quickly. It was probably a storm that generated those four inches in an hour or two.” Tr. v. 3 p. 49 l. 12-17. Garigen also described the October 2008 storm as a “pretty serious storm.” Tr. v. 3 p. 52 l. 2-3.

of the County's stormwater manager, Tom Garigen. Mr. Garigen has been intimately involved in addressing the drainage conditions in the Dogwood Lake Watershed and has a vested interest, as the staff person responsible for spending millions of dollars of public funds on improvements, in determining whether the new investment in drainage infrastructure is working. Garigen's testimony that he has inspected the area following different rain events for purposes of determining water surface elevations, and has found his site inspections to be consistent with LPA's predictions is compelling. Tr. v. 3 p. 28 l. 16-24, p. 29 l. 1-25. Garigen's conclusion that "the LPA model accurately represents what's actually occurring in the watershed" is supported by his undisputed observations. Tr. v. 3 p. 29 l. 23-25. Garigen's observations are significant in evaluating Powell's testimony. Powell expressed concern that the LPA assumptions in the revised reports that the drainage improvements were functioning as designed might be flawed based on the possible impediments caused by the trash screen at the termination of the dual 60" pipes, and based on the intersection of the dual 60" pipes with the gravity sewer line. But Garigen's field observations following rainfall events reveal that the infrastructure is functioning consistent with LPA's predictions.

### CONCLUSIONS OF LAW

Based on the foregoing Findings of Fact, I conclude the following as a matter of law:

1. This Court has subject matter jurisdiction in this case pursuant to S.C. Code Ann. §1-23-310 et seq. (2005 & Supp. 2006) and S.C. Code Ann. §44-1-60 (2008). The hearing before the ALC is a contested case hearing pursuant to the APA and is heard *de novo*. Marlboro Park Hosp. v. S. C. Dep't of Health and Env'tl. Control, 358 S.C. 573, 595 S.E.2d 851 (2004). The proper standard of proof to be applied is a preponderance of the evidence. Anonymous (M-156-90) v. State Bd. of Med. Examiners, 329 S.C. 371, 496 S.E.2d 17(1998); National Health Corp.

v. Dep't of Health and Env'tl. Control, 298 S.C. 373, 380 S.E.2d 841 (Ct. App. 1989). Furthermore, the burden of proof is upon the party asserting the affirmative of an issue, and, therefore, the Petitioner bears the burden of proving that the agency decision was in error under the statutory and regulatory standards. Leventis v. Dep't of Health and Env'tl. Control, 340 S.C. 118, 530 S.E.2d 643 (Ct. App. 2000).

2. The S.C. Stormwater Management and Sediment Reduction Act of 1991, S.C. Code Ann. §48-14-10 et seq. and the regulations promulgated thereunder, 26 S.C. Code Ann. Reg. 72-300 et seq. require a permit for land disturbing activities, unless an exemption applies. §48-14-30(A). Additional stormwater management requirements are contained in 24 S. C. Code Ann. Reg. 61-9.122.26. Compliance under both sets of requirements is accomplished in one permitting action through authorization of coverage under the NPDES General Permit. Pet. Exh. 12.

3. "It is generally recognized that the trier of fact, who has the opportunity to observe the witnesses and listen to their testimony in person, is in the best position to determine issues of witness credibility." Dixon v. Dixon, 336 S.C. 260, 263, 519 S.E.2d 357, 358 (Ct. App. 1999). The weight and credibility assigned to evidence presented at the hearing of a matter is within the province of the trier of fact. See, S.C. Cable Television Ass'n v. S. Bell Tel. & Tel. Co., 308 S.C. 216, 222, 417 S.E.2d 586, 589 (1992).

With regard to expert testimony, it is generally recognized that "expert opinion evidence is to be considered or weighed by the triers of the facts like any other testimony or evidence" and that "the triers of the facts cannot, and are not required to, arbitrarily or lightly disregard, or capriciously reject, the testimony of experts or skilled witnesses, and make an unsupported finding contrary to the opinion." 32A C.J.S. Evidence § 727, at 82-83 (1996). However, the trier

of fact may give an expert's testimony the weight he or she determines it deserves, Florence County Dep't of Soc. Servs. v. Ward, 310 S.C. 69, 72-73, 425 S.E.2d 61, 63 (Ct.App. 1992), and may accept the testimony of one expert over that of another, S.C. Cable Television Ass'n v. S. Bell Tel. & Tel. Co., 308 S.C. 216, 417 S.E.2d 586 (1992). In weighing such expert testimony, the general principles for determining whether evidence warrants a finding remain applicable; accordingly, "an expert's opinion which is based on guess, surmise, or conjecture has little evidentiary value, and expert opinion evidence lacks probative force where the conclusions are contingent, speculative, or merely possible." 32A C.J.S. Evidence § 730, at 87 (1996).

4. In its review of the proposal for redevelopment of the South Course, OCRM did not apply the standards generally applicable to waters of the State. S. C. Code Ann. § 48-14-10 et seq. and 26 S. C. Code Ann. Reg. 72-300 et seq. and 24 S. C. Code Ann. Reg. 61-9.122.26, related to stormwater management and stormwater discharges, were promulgated after adoption of the S. C. Pollution Control Act and after promulgation of 25 S. C. Code Ann. Reg. 61-68(E)(4). "It is well-settled that a specific statute controls over a more general one, e.g., Capco of Summerville, Inc. v. J.H. Gayle Const. Co., Inc., 368 S.C. 137, 628 S.E.2d 38 (2006), and that a more recent legislative enactment prevails over an earlier one. E.g., Town of Duncan v. S.C. Budget & Control Bd., 326 S.C. 6, 482 S.E.2d 768 (1997)." Bursey v. SCDHEC, 369 S. C. 176, 631 S. E. 2d 897 (2006).

5. To endorse Petitioner's position, that the existing drainage ponds on the golf course cannot be incorporated into the stormwater management plan and system for the proposed redevelopment of the golf course without requiring pre-treatment of the stormwater discharge, would require this Court to ignore not only the intent and purpose of the Stormwater Management Act and regulations, but common sense as well. Pre-treatment of stormwater

running into a stormwater pond is a contradiction in terms. The very purpose of the stormwater pond is to intercept and treat the stormwater before discharge into a receiving waterbody.

6. The S. C. Supreme Court recognized the inherent conflict in denying a stormwater permit based on regulations promulgated under the S. C. Pollution Control Act in Responsible Economic Development et al. v. SCDHEC and Wal-Mart et al., 371 S. C. 547, 641 S.E.2d 425 (2007). "In the absence of statutory authorization to apply the two acts and their corresponding regulations to each other, the regulations of the Pollution Control Act do not apply to the Stormwater Act or its regulations." Id. at 555. While this contested case is factually distinct,<sup>10</sup> Responsible Development supports a conclusion that the requirements from the Pollution Control Act and the Stormwater Management and Sediment Reduction Act must be reconciled, and one set of requirements cannot be applied so as to defeat the other. The issue raised by Petitioner – whether, in light of the pre-treatment requirement in 25 S. C. Code Ann. Reg. 61-68(E)(4), the Department can approve a stormwater management plan and land disturbance permit application which allows for an existing system of stormwater ponds to be incorporated into a new development – creates a potential inconsistency between two statutory and regulatory schemes intended to protect water quality. The appropriate response to this potential inconsistency is to construe the potentially conflicting requirements in a manner that reconciles any inconsistency, which is what OCRM staff did when it did not apply Reg. 61-68(E)(4) to the golf course ponds on the Old South Course. "Repeal by implication is disfavored, and is found only when two statutes are incapable of any reasonable reconciliation. Mims v. Alston, 312 S. C. 311, 440 S.E.2d 357 (1994). Moreover the repugnancy must be plain, and if the two provisions can be construed so that both can stand, a court shall so construe them." Capco of

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<sup>10</sup> Wal-Mart obtained a stormwater permit in 2003 under S. C. Code Ann. Reg. 72-300 et seq., prior to implementation of the General Permit in 2006. Deertrack Golf, Inc., obtained permit coverage under the General Permit, which combined requirements of Reg. 61-9.122.26 and Reg. 72-300 et seq.

Summerville, Inc., v. J. H. Gayle Const. Co., 368 S. C. 137, 142, 628 S.E.2d 38,41 (2006), quoting City of Rock Hill v. South Carolina DHEC, 302 S. C. 161, 167, 394 S.E.2d 327, 331 (1990).

7. Petitioner has raised the following question for resolution in this contested case: “are the waters of the state and wetlands on the site connected to navigable waters of the United States by surface connections and are the wetlands thus federal jurisdictional wetlands?”

It is uncontested that the U.S. Army Corps of Engineers determined that there are no waters of the United States on the site. This conclusion involves considerations entirely of federal law turning on the presence of interstate commerce. In Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers, 531 U.S. 159, 121 S.Ct. 675, 148 L.Ed.2d 576 (2001) (known commonly as the SWANCC case), the Court concluded the federal government does not have statutory authority to regulate wetlands where such areas are isolated from the surface water system of creeks, streams and rivers which drain into traditional navigable waters. Again, in Rapanos v. U.S., 547 U.S. 715, 126 S.Ct. 2208, 165 L.Ed. 159 (2006), the Court held that the Corps’ authority was limited to areas with a substantial connection to navigable waters and, thus, to interstate commerce.

Respondents and Intervenor filed a Motion in Limine with this Court to exclude any and all evidence related to this issue as one outside this Court’s jurisdiction and one not relevant to any issue properly before the Court. In response to the Motion, this Court ruled that evidence of the existence of wetlands on the project site is relevant to Petitioner’s argument regarding the CMP policies, but evidence as to the presence of wetlands or other areas constituting “waters of the United States” subject to the Corps’ jurisdiction under the federal Clean Water Act, 33

U.S.C. §1301, et seq. is irrelevant. Subject to that ruling, this Court accepted evidence from the parties concerning whether any part of the project site is a wetland.

8. Petitioner claims that there are wetlands on the site which will be disturbed by the permitted activity and that the CMP policies require consideration of those impacts before OCRM may issue a storm water permit. Petitioner failed to carry their burden of proof, however, as to the existence of any wetlands on the project site. As there are no wetlands on the site, the provisions of the CMP policies related to wetlands have no application to the stormwater plan at issue. OCRM did not violate any provision of the CMP policies or the Coastal Zone Management Act in issuing the stormwater permit at issue.<sup>11</sup>

9. The legislative intent behind the Stormwater Management and Sediment Reduction Act is "to reduce the adverse effects of stormwater runoff and sediment and to safeguard property and the public welfare by strengthening and making uniform the existing stormwater management and sediment control program." Responsible Economic Development et al. v. SCDHEC and Wal Mart et al., 371 S.C. 547, 641 S.E.2d 425 (2007). The program requires detailed engineering analysis and information regarding routing and management of storm water from the site.

Reg. 72-305 contains the regulatory review and permitting procedures, and Reg. 72-307 contains the minimum design standards and specific design criteria. That regulation requires that a project be designed to meet the pre and post development requirements for the two and ten year storm event. Reg. 72-307(C). This project exceeds the State standards as it has been

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<sup>11</sup> In Spectre, LLC v. S.C. Department of Health and Environmental Control, Case No. 06-ALJ-07-0711-CC, this Court concluded that the CMP policies Petitioner claims were violated by OCRM were not properly promulgated as regulations and could not, therefore, be applied as binding norms, as Petitioner seeks to have them applied. This Court also found that, even if these policies may legally be applied to storm water permits, they do not, by their own terms, apply to isolated wetlands. As the evidence does not support a finding of the existence of any wetland on the site to which the CMP policies might apply, the Court does not need to reach the issue that was addressed in the Spectre case.



designed to meet the 25 year storm event. The permit application includes design measures that will limit the potential for flooding Petitioner's residents. These measures include a substantial increase in the storage capacity with the construction of additional ponds and the re-routing of approximately 90% of the contributing drainage area around Circle Drive, rather than through Circle Drive. Moreover, the applicant properly relied on the extensive watershed modeling performed by Horry County.

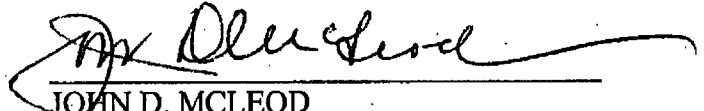
Here, Petitioner's expert expressed concern over a lack of calibration of the LPA model, over the ETS designation of drainage basin boundaries, and over the reliability of the LPA model and predictions in the event the Horry County drainage improvements are not functioning as assumed by LPA. This testimony, based on concerns and conjecture and is not supported by the evidence. This Court, while appreciative of Mr. Powell's professional concerns, assigns more weight to the opinions of Deertrack's expert and to the field observations of Mr. Garigen.

The stormwater management plan prepared by ETS, which incorporated predictions made by LPA for Horry County and accounted for the drainage improvements that Horry County has undertaken over the past eight years in the Dogwood Lake Watershed, is consistent with the requirements of S. C. Code Ann. §48-14-10 et seq., the Stormwater Management and Sediment Reduction Act, and with R. 72-300 et seq., R. 61-9.122.26 et seq., and the terms and conditions of the General Permit.

10. As to other issues and allegations of error raised by Petitioner in its Amended Prehearing Statement that are not specifically addressed herein, this Court concludes that Petitioner failed to carry its burden of proof and to put forth any testimony or evidence to support its position on issues.

It is, therefore, ORDERED, that the Coastal Zone Consistency Certification and Grant of General Permit coverage issued by the Department on February 29, 2008, to Deertrack Golf, Inc. be, and it is hereby, AFFIRMED.

AND IT IS SO ORDERED.

  
JOHN D. MCLEOD  
ADMINISTRATIVE LAW JUDGE

June 9, 2009  
Columbia, South Carolina

CERTIFICATE OF SERVICE  
This is to certify that the undersigned has this date served this order in the above entitled action upon all parties to this cause by depositing a copy hereof, in the United States mail, postage paid, or in the Interagency Mail Service addressed to the party(ies) or their attorney(s).

This 9 day of June, 2009  
By: Anthony R. Holzman  
Judicial Law Clerk

# The South Carolina Court of Appeals

Deerfield Plantation Phase II B  
Property Owners Association,

Appellant,

v.

South Carolina Department of Health  
and Environmental Control and  
Deertrack Golf, Inc.,

Respondents,

v.

Bill Clark Homes of Myrtle Beach,  
LLC,

Respondents

The Honorable John McLeod  
Administrative Law Court  
Trial Court Case No. 2008-AL-07-00221

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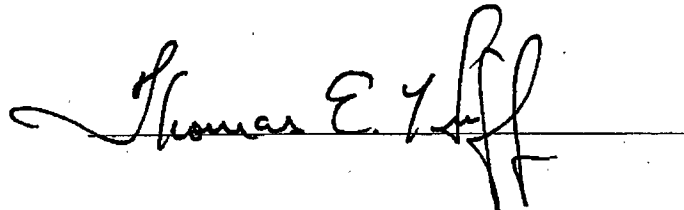
## ORDER

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Respondent Deertrack Golf, Inc.'s motion to establish a briefing schedule is denied. Appellant's motion to remand is granted. As requested by Appellant and Respondent South Carolina Department of Health and Environmental Control (DHEC), this case is remanded to the ALC to further remand the matter to DHEC for additional administrative action. This Court takes note that this matter has been pending for a significant period of time. The parties, therefore, shall proceed expeditiously on remand.

IT IS SO ORDERED.

Columbia, South Carolina



**FILED**

1-12-12

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cc: Amy Elizabeth Armstrong, Esquire  
Carlisle Roberts, Jr., Esquire  
Davis A. Whitfield-Cargile, Esquire  
Mary D. Shahid, Esquire  
Stephen Groves, Esquire  
Stanley E. Barnett, Esquire

STATE OF SOUTH CAROLINA  
ADMINISTRATIVE LAW COURT

Deerfield Plantation Phase II B  
Property Owners Association,

Petitioner,

-vs-

South Carolina Department of  
Health and Environmental Control  
and Deertrack Golf, Inc.,

Respondents.

-vs-

Bill Clark Homes of Myrtle Beach, LLC,

Intervenor.

Docket No. 08-ALJ-07-0221-CC

ORDER OF REMAND

This matter comes before the Administrative Law Court (ALC or Court) by remand from an Order of the South Carolina Court of Appeals filed on January 12, 2012.

The Order sets forth that "this case is remanded to the ALC to further remand the matter to DHEC for additional administrative action." Therefore,

**IT IS HEREBY ORDERED** that this matter is **REMANDED** to the South Carolina Department of Health and Environmental Control for further administrative action.<sup>1</sup>

**AND IT IS SO ORDERED.**

CERTIFICATE OF SERVICE

This is to certify that the undersigned has this date served this order in the above entitled action upon all parties to this cause by depositing a copy hereof,

February 21, 2012  
Columbia, SC

in the United States mail, postage paid, or in the United States  
Mail Service addressed to the party(ies) or their attorney(s).

This 21 day of February, 2012.

By: Anthony R. Holman  
Judicial Law Clerk

John D. McLeod, Judge  
S.C. Administrative Law Court

<sup>1</sup> The Order of the Court of Appeals does not specify what action is to be taken.

**FILED**

FEB 21 2012

SC ADMIN. LAW COURT

STATE OF SOUTH CAROLINA )  
COUNTY OF HORRY )

IN THE COURT OF COMMON PLEAS  
CASE NO. 2008-CP-26-7692

DEERFIELD PLANTATION PHASE  
IIB PROPERTY OWNERS  
ASSOCIATION,

Plaintiff,

vs

HORRY COUNTY PLANNING  
COMMISSION, DEERTRACK GOLF,  
INC., and BILL CLARK HOMES OF  
MYRTLE BEACH, LLC,

Defendants.

**ORDER AFFIRMING DECISION  
OF HORRY COUNTY PLANNING  
COMMISSION**

Appearances:

James S. Chandler, Jr., Esq. and Amy Armstrong, Esq. for Plaintiff  
Mary D. Shahid, Esq. and Richard M. Smith, Esq. for Defendant Deertrack Golf,  
Inc.  
Emma Ruth Brittain, Esq., and Davis Inabnit, Esq. for Defendant Horry County  
Planning Commission

Introduction

This appeal from a decision of the Horry County Planning Commission was before me for hearing on May 18, 2010. This appeal is captioned as "Amended Notice of Appeal, Petition, Request for Pre-Litigation Mediation, and Complaint." The May 18, 2010, hearing was limited to a hearing of the Appeal. Plaintiff advised the Court at the May 18, 2010, hearing that its cause of action for Declaratory Judgment had been severed by agreement of the parties to be heard separate from the appeal. In addition, although the Complaint includes a "Request for Pre-

<sup>1</sup> Defendant Bill Clark Homes of Myrtle Beach, LLC, did not make an appearance before the Court but counsel for Defendant sent a message to the Court the day prior to this hearing advising that Defendant would not be in attendance, but adopted and endorsed the positions set forth by Co-Defendants.

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Litigation Mediation,"<sup>2</sup> and the Defendants provided Trial Briefs including arguments against Pre-Litigation Mediation, Plaintiff did not offer argument regarding this Request and have therefore abandoned this Request.

### Background

The matters in controversy in this appeal began in 2005. Deertrack Golf Inc. ("Deertrack") owns property located in the Town of Surfside Beach, Horry County, consisting of 158 acres known as the Old South Golf Course holes 1-18. This golf course, along with a companion course known as the North Course, are located within and adjacent to the existing residential development known as Deerfield Plantation. There are multiple Property Owner Associations ("POAs") within the Deerfield Plantation residential subdivision. Plaintiff Deerfield Plantation Phase IIB Property Owners ("Deerfield") is one of these POAs.

On September 2, 2005, Defendant Bill Clark Homes of Myrtle Beach, LLC ("Bill Clark") and Deertrack entered into a purchase contract for the Old South Golf Course property.<sup>3</sup> Bill Clark designed the residential subdivision that is the subject of this appeal which encompasses approximately 85 acres of the South Course, or Phase I of the redevelopment of the South Course.<sup>4</sup> In furtherance of its plans to redevelop the South Golf Course as a new residential subdivision Defendant Bill Clark prepared a subdivision plat which was submitted to the Horry County

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<sup>2</sup> S. C. Code Sec. 6-29-1150 authorizes a property owner "whose land is the subject of a decision of the planning commission" to challenge the decision of the planning commission by filing an appeal, and to request "pre-litigation mediation." Defendants argue that this remedy can only be invoked by the property owner who, in this case, is Deertrack Golf, Inc., and not by third parties. While it is clear that interested third parties have the right to participate in mediation once invoked, I agree with Defendants that the remedy of pre-litigation mediation is a property owner's remedy exclusive to Deertrack Golf, Inc., which cannot be invoked by third parties.

<sup>3</sup> Based on the declining economic viability of both the North and South Golf Courses both courses were closed in 2005 and offered for sale.

<sup>4</sup> Deertrack's decision to offer the South Golf Courses for sale and redevelopment, Bill Clark's proposed subdivision, and the sale of the North Course triggered significant controversy and opposition from surrounding Deerfield property owners and there are other civil actions, in addition to the severed claim for Declaratory Judgment asserted as part of the Amended Notice of Appeal, that are pending related to this controversy. See Hill et al. v. Deertrack Golf, et al. 2006-CP-26-4440 (North Course); Blaine Lilienquist individually, and on behalf of a class of all others similarly situated v. Deertrack Golf, Inc., (Class Action - South Course) 2006-CP-26-818.

Planning Commission's Technical Review Committee ("the Committee") on November 30, 2006<sup>5</sup> for preliminary plan approval. The Committee provided preliminary plan approval but enumerated multiple conditions of preliminary plan approval. (Certified Record p. 40 – Appeal Information from Planning Commission packet.) The minutes of the Technical Review Committee's meeting indicated that the meeting was conducted "at 3:00 p.m. in the Multi-purpose Room of the Government & Justice Center" and "[i]n accordance with the SCFOIA, notices of the meeting were sent to the press (and other interested persons and organizations requesting notification) providing the agenda, date, time, and place of the meeting." (Exhibit A, Trial Brief of Deertrack Golf, Inc.)

Between November 30, 2006 and 2008, Defendants Deertrack and Bill Clark undertook the task of satisfying all conditions for preliminary plan approval. On July 14, 2008, Planning and Zoning staff received a request for a "hearing" from the Secretary of the Deerfield Plantation Phase IIB POA. (Exhibit B, Trial Brief of Deertrack Golf, Inc.) The County Planning Director informed the POA's Secretary that the County staff would interpret the request as an appeal of any conclusions by the Planning Commission regarding whether the conditions for plan approval had been satisfied. (Exhibit C, Trial Brief of Deertrack Golf, Inc.) On August 28, 2008, the Planning Commission held a Planning Commission Workshop and heard objections to the proposed redevelopment of the South Course from representatives of the various subdivisions whose members were in attendance. At the conclusion of public comment, the Planning Commission voted to "uphold staff's decision that the developer had met all of Planning Commission conditions to receive preliminary approval..." (Certified Record, Minutes.) Plaintiff's appeal to this Court is from this decision. <sup>6</sup>

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<sup>5</sup> The 2006 approval was for a 326 lot subdivision.

<sup>6</sup> Defendants Bill Clark and Deertrack argue that this appeal is procedurally defective. The decision rendered by the staff, and reviewed by the Planning Commission, in August of 2008 was not a decision to "approve or disapprove a land development plan" as contemplated by S. C. Code Ann. Sec. 6-29-1150(C) which authorizes appeals to the



### Standard of Review

The standard for reviewing a decision of a planning commission is that there is a strong presumption in favor of affirming a zoning or planning ordinance and a local government's application of that ordinance. Petersen et al. v. City of Clemson, 439 S. E. 2d 317, 312 S.C. 162 (Ct. App. 1994), citing Bob Jones University, Inc. v. City of Greenville, 243 S.C. 351, 133 S. E. 2d 843 (1963). A court must not disturb a local government decision "if the propriety of that decision is even 'fairly debatable'" and "not so unreasonable as to impair or destroy constitutional rights." Harbit v. City of Charleston & City of Charleston Planning Department, 382 S.C. 383, 675 S.E.2d 776 (Ct. App. 2009), quoting Knowles v. City of Aiken, 305 S.C. 219, 407 S. E. 2d 639 (1991). Consequently, Plaintiff has the burden of proving that the Planning Commission failed to comply with any applicable statute and ordinance governing actions of that Commission in order to demonstrate a lack of propriety. Alternatively Plaintiff must demonstrate that its constitutional rights were violated by the actions of the Planning Commission. The trial court must uphold the Planning Commission's decision unless there is no evidence to support it. Kurschner v. City of Camden Planning Commission, 376 S. C. 165, 656 S. E. 2d 346 (2008).

Based on the record before me, including the filings made by the parties, the Certified Record of proceedings before the Horry County Planning Commission and its standing committees, and the arguments of counsel, I make the following findings of fact and conclusions of law:

### Findings of Fact

1. Defendant Deertrack Golf, Inc., is the record owner of property described as the Old South Golf Course consisting of 158 acres and located in the Town of Surfside Beach, Horry County, S.

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Court of Common Pleas The decision subject to review in accordance with Sec. 6-29-1150 was made by the County's duly authorized Committee in 2006, and was never challenged by Plaintiff. While there is merit to Defendants' position, a ruling on this issue is unnecessary since this Court finds and concludes that there is no basis upon which to grant this appeal.

C. The Old South Golf Course is located within an existing development known as Deerfield Plantation. There are multiple subdivisions within Deerfield Plantation governed by separate Property Owner's Associations. Plaintiff is a Property Owner's Association consisting of residents of a subdivision that is contiguous to the Old South Golf Course.

2. Defendant Bill Clark has entered into a contract with Defendant Deertrack to purchase the Old South Golf Course. Defendant Bill Clark plans to redevelop the Golf Course, which has been closed for play, as a residential subdivision. In furtherance of its plans, Defendant Bill Clark prepared a development plan and presented the plan to Horry County Planning staff. The development plan was reviewed by the Horry County Planning Commission's Technical Review Committee at its public meeting on November 30, 2006, and was later reviewed by the Horry County Planning Commission at a public workshop conducted on August 28, 2008. The Technical Review Committee approved the redevelopment plan but imposed multiple conditions of approval. The Planning Commission and planning staff confirmed that Bill Clark and Deertrack had satisfied all conditions of preliminary plan approval.

3. It is unclear from the County's Certified Record as to whether members of the public attended the meeting conducted by the Technical Review Committee in 2006, although it is clear from the Minutes of this meeting included in the County's Certified Record that notice was provided of the meeting and that the meeting was a public meeting. It is undisputed, however, that interested members of the public were in attendance, and were allowed to present information, before the Planning Commission in 2008.<sup>7</sup>

4. In accordance with Horry County's Ordinance, Article VI, Sec. 2-74, all meetings conducted by boards, committees, and commissions shall be held in a place accessible and open to

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<sup>7</sup> Defendant Deertrack estimates that over 100 people attended the meeting on August 28, 2008. Plaintiff's representative Frank Yulinko, who provided sworn testimony to the Court at the May 18<sup>th</sup>, 2010, hearing, estimated that 80 people were in attendance.

the general public, and shall be advertised with a minimum of twenty-four hours notice, and notice in the newspaper of any public hearings.

5. In accordance with Horry County's Ordinance, Article III, Sec. 15-37, "all meetings of the planning commission shall be open to the public and all records of the commission shall be public records." The Planning Commission is empowered to "[r]eview whether specific proposed developments conform to the principles and requirements of the comprehensive plan for the growth and improvement of the county." Article III, Sec. 15-38(5).

6. The County has promulgated Land Development Regulations. Article 2 of these Regulations provides that "[p]reliminary plan approval authorizes the applicant to proceed with preparation of the final plan and the installation of site improvements. Approval does not authorize the sale or transfer of lots. ... Applicants have two years, for each phase; from the date that Planning Department grants preliminary plan approval to record a final plat."

7. S. C. Code Sec. 6-29-340 sets forth the functions, powers, and duties of local planning commissions. In accordance with Sec. 6-29-360, the Planning Commission is self-governing, with the authority to "adopt rules of organizational procedure" and to "keep a record of its resolutions, findings, and determinations, which record must be a public record." S. C. Code Sec. 6-29-1150 authorizes the Planning Commission to implement a procedure for the submission and approval of disapproval of preliminary development plans. If planning staff takes action, that action is directly appealable to the Planning Commission.

8. Plaintiff claims that the actions taken by the Technical Review Committee, Planning Staff, and Planning Commission, were in violation of Plaintiff's constitutional rights of due process. Notably, Plaintiff is not the owner of the property that was the subject of the Planning Commission's review. Plaintiff attempted to show an ownership interest in the property by

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reference to the Amended Declaration and Establishment of Conditions, Reservations, Covenants, and Restrictions for Phase IIB, Deerfield Plantation Single Family Residential Subdivision. Paragraph 14 of these Covenants includes "easements to permit the doing of every act necessary and proper in the playing of golf on the golf course adjacent to the lots which are the subject of these Covenants." Paragraph 15 includes a reservation of rights to the POA of "a reasonable easement and right of ingress and egress over, upon, and across each lot for the purpose of ... surface water control ... ." According to the testimony of Plaintiff's representative, Frank Yulinko, the development plan approved by the Planning Commission will cause flooding on Plaintiff's members' properties and restrict the members' access to the golf course which triggers the property rights set forth in the Covenants and Restrictions. A copy of these Covenants and Restrictions were submitted by Plaintiff to planning staff and the Planning Commission.

9. Plaintiff misapprehends these Covenants and Restrictions which are applicable to the acreage that constitutes Deerfield Plantation Phase IIB, not the Old South Golf Course. These Covenants and Restrictions do not create property rights for Plaintiff and its members in the Old South Golf Course.

10. Plaintiff provided the Court with no specificity as to the basis for its appeal. This Court repeatedly requested that Plaintiff cite to any ordinance, statute, or specific requirement that was overlooked or misapplied by either the Technical Review Committee or the Planning Commission, and Plaintiff could not provide a response to the Court's inquiry. This Court even resorted to the extraordinary measure<sup>8</sup> of allowing Plaintiff to present testimony in support of its position that the Defendant did not utilize statutorily and constitutionally required procedures in its consideration of

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<sup>8</sup> This Court's review is limited to the record before the Planning Commission. While S. C. Code Sec. 6-29-840 governs circuit court review of decisions of the Zoning Board of Appeals, in Kurschner v. City of Camden Planning Commission, 376 S. C. 165, 656 S. E. 2d 346 (2008) the court cited Sec. 6-29-840 as applicable for determining the Standard of Review for decisions of a planning commission. In accordance with Sec. 6-29-840 "the court may not take additional evidence."

Defendant Bill Clark's development plan. Frank Yulinko, President of the POA, testified that he was unaware of the actions of the Technical Review Committee in 2006, but also acknowledged that he was not the designated spokesperson of Plaintiff POA in 2006. Yulinko acknowledged that he was notified of the proceedings before the Planning Commission in 2008, and that he was allowed five minutes to present testimony, but claims that the time allotted to speakers was insufficient which rendered the proceedings before the Planning Commission meaningless. Yulinko admitted that in addition to his allotted five minutes, other representatives of the POAs within Deerfield Plantation were allowed to provide public comment and that the only restriction imposed by the Planning Commission, other than time limits, was that each speaker should speak for the various neighborhood groups that opposed the redevelopment of the golf course and no group should have more than one speaker.

11. Plaintiff has also asked for this Court to remand this matter to the Planning Commission for the specific purpose of considering a determination by the U. S. Army Corps of Engineers issued in March of 2010, regarding the boundaries of waters of the United States and/or jurisdictional wetlands on the Old South Golf Course. County staff has indicated that this new information does not warrant a remand or effect the validity of the decisions of the Planning Commission and Technical Review Committee.

#### Conclusions of Law

1. There is a strong presumption in favor of the validity of municipal zoning ordinances, and in favor of the validity of their application, and when the planning commission and the council of a local government have acted after reviewing all of the facts, the court should not disturb the finding unless such action is arbitrary, unreasonable, or a clear abuse of its discretion, or unless it has acted

illegally and in excess of its lawfully delegated authority. Harbit v. City of Charleston, 382 S. C. 383, 675 S. E. 2d 776 (2009).

2. Procedural due process imposes constraints on governmental decisions that deprive individuals of liberty or property interests within the meaning of the Due Process Clause of the Fifth or Fourteenth Amendment of the United States Constitution. Due Process is flexible and calls for such procedural protections as the particular situation demands. In the context of a hearing before a Planning or Zoning Board or Commission, procedural due process is provided with notice and an opportunity to be heard. Harbit v. City of Charleston, Id.

3. Decisions by the Planning Commission to deny or allow use of land constitute an exercise of discretionary authority, as opposed to adjudicatory power. Consequently, due process does not require "the full gamut of rules and procedures" in matters before the Planning Commission. In determining what process is due, a court will consider the private interest affected by the proceeding, the risk of error created by the chosen procedure, and the countervailing governmental interest supporting the challenged procedure. Matthews v. Eldridge, 424 U. S. 319, 96 S. Ct. 893, 47 L. Ed. 2d 18 (1976). Kurschner v. City of Camden Planning Commission, 376 S. C. 165, 656 S. E. 2d 346 (2008).

4. Here, Plaintiff has not demonstrated a "private interest" beyond an interest in preventing the redevelopment of the Old South Course. Plaintiff's interest is tantamount to the interest of concerned citizens and is different and distinct from the interest of an entity or individual with a property interest in the Old South Golf Course. Plaintiff's interest, as a member of the public, was protected by the Planning Commission. In 2006, the Technical Review Committee conducted a public meeting and provided the required notice of the meeting. While the Certified Record does not reflect public attendance at the meeting, that does not support a conclusion that the Technical

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Review Committee failed to provide notice and a meaningful opportunity to be heard. And whether or not due process was provided before the Technical Review Committee, Plaintiff was given a second chance to appear two years later before the Planning Commission. Plaintiff, and other opponents of the redevelopment project, were allowed to provide comments and supporting documentation to the Planning Commission. The mere fact that the Planning Commission imposed time restraints upon Plaintiff's presentation does not support a claim of denial of due process. Instead, it reflects the Planning Commission's concern regarding proper order and conduct of the public hearing, given the number of citizens who attended and expressed an interest in speaking.

5. In order to prove a denial of substantive due process, a party must show that he was arbitrarily and capriciously deprived of a cognizable property interest rooted in state law. Sunset Cay, LLC v. City of Folly Beach, 357 S. C. 414, 593 S. E. 2d 462 (2004). Plaintiff has failed to demonstrate a property interest in the Old South Golf Course that is negatively impacted or eliminated by redevelopment of the golf course.<sup>9</sup>

6. Moreover, Plaintiff has not demonstrated that the Planning Commission failed to follow proper procedures or to adhere to the requirements of State law and local ordinances.

It is, therefore, ORDERED:

1. Plaintiff's Appeal of the action of Horry County Planning Commission in concluding that Defendants Bill Clark and Deertrack Golf have met all conditions of preliminary plat approval

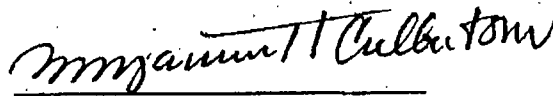
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<sup>9</sup> Much of Plaintiff's representative Frank Yulinko's testimony focused on his belief that redevelopment will result in flooding Plaintiff's members' properties. This Court notes that Horry County has a stormwater management ordinance applicable to this redevelopment, and there has been no demonstration by Plaintiff that the proposed redevelopment is inconsistent with that ordinance. In addition, the issue of whether Bill Clark and Deertrack are properly managing projected stormwater flows from the redevelopment was fully debated in a contested case before the S. C. Administrative Law Court entitled Deerfield Plantation Phase IIB POA v. South Carolina Department of Health and Environmental Control, Deertrack Golf Inc., and Bill Clark Homes of Myrtle Beach, LLC, Docket No.: 08-ALJ-07-0221-CC. There the Administrative Law Judge concluded that the proposed redevelopment exceeded State standards for stormwater management, and would result in decreasing the potential for flooding adjacent areas based on the drainage improvements being installed by Bill Clark and Deertrack.

imposed by the Technical Review Committee be, and it is hereby, dismissed, and the decision of the Planning Commission is affirmed; and

2. Plaintiff's request for remand based on information obtained almost three years after the decision of the Technical Review Committee and a year and a half after the decision of the Planning Commission is denied.. County staff does not agree with Plaintiff that a remand is necessary and I find and conclude that Plaintiff has failed to demonstrate any basis for remand.

AND IT IS SO ORDERED.



Benjamin H. Culbertson  
Judge, Fifteenth Judicial Circuit

Georgetown, South Carolina

July 7, 2010



STATE OF SOUTH CAROLINA  
COUNTY OF HORRY

IN THE COURT OF COMMON PLEAS  
FIFTEENTH JUDICIAL CIRCUIT  
Case No. 2008-CP-26-7692

DEERFIELD PLANTATION PHASE II B  
PROPERTY OWNERS ASSOCIATION,

Plaintiff,

vs.

HORRY COUNTY PLANNING  
COMMISSION and DEERTRACK GOLF,  
INC.

Defendants.

**ORDER**

FILED  
HORRY COUNTY  
13 JUN 24 PM 12:55  
MELANIE HUGGINS-WARD  
CLERK OF COURT

This matter was before me for trial in Horry County, Conway, S. C. on June 3<sup>rd</sup> and 4<sup>th</sup>, 2013. This civil action initially included an appeal of a decision made by the Horry County Planning Commission to allow redevelopment of a golf course owned by Defendant Deertrack Golf, Inc. ("Deertrack") along with a request for declaratory judgment. The claims were bifurcated and on May 18, 2010, Plaintiff's appeal of the decision of Horry County Planning Commission was heard by the Honorable Benjamin H. Culbertson. On July 7, 2010, Judge Culbertson issued an Order denying Plaintiff's appeal and affirming the decision of the Horry County Planning Commission. The remaining action for declaratory judgment included Plaintiff's claims that it was entitled to a declaration of an easement across the golf course owned by Deertrack by prescription and/or implication. This Court conducted a non-jury trial on these surviving claims.<sup>1</sup>

<sup>1</sup> In addition, Plaintiff's Amended Complaint includes a claim that "the Plaintiff and its members have acquired special property rights requiring that the golf course property continue as a golf course." Amended Complaint, p. 6, paragraph C. This claim was removed from this action and joined with a separate civil action, a class action, Howard W. Durham, individually, and on behalf of a class of all others similarly situated v. Deertrack Golf, Inc., 2006-CP-26-818. The class action was dismissed in accordance with SCRCP, Rule 40(j).

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After consideration of the evidence presented at the non-jury trial the Court reached the following holding in favor of Defendant. The Court finds that the Defendant does not dispute that the Plaintiff may, as an adjoining landowner, drain stormwater across the South Course property. However, the Plaintiff has not established any easement, theory, or right of use in the specific drainage ditches/system currently in place on the South Course property, whether by prescriptive easement, easement by necessity, or easement by prior use. As such, the Plaintiff's request for declaratory relief is denied and this civil action is dismissed with prejudice.

### **FACTUAL BACKGROUND**

Deertrack is the record owner of property known as the South Golf Course ("South Course") located within the Deerfield Plantation residential development in the Town of Surfside Beach, Horry County, South Carolina. Plaintiff is a Property Owners Association of the residential subdivision known as Deerfield Plantation Phase II B ("Phase II B") which consists of improved lots located on Circle Drive and Plantation Drive. Many of the lots within Phase II B are located adjacent to the South Course. The subdivision and golf course were constructed in or around 1980. The *Declaration of Conditions, Reservations, Covenants and Restrictions for Deerfield Plantation Single Family Residential Subdivision, Phase II B*, was recorded September 28, 1979. It is undisputed that stormwater that flows from portions of Phase II B drains through the South Course and much of the area known as Phase II B has, historically, drained through this same area.

Deertrack closed the South Course for golf play in or around 2005 because it was not economically viable. Deertrack entered into a Purchase Agreement with a residential homebuilder, Bill Clark Homes of Myrtle Beach, LLC, ("Bill Clark Homes") for purchase and redevelopment. Bill Clark Homes retained the services of a civil engineering firm, Engineering

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and Technical Services, Inc. ("ETS"). ETS engineer, Thomas Bevins, a professional engineer licensed in the State of South Carolina, designed residential subdivision plans for redevelopment of the South Course. These plans included drainage plans necessary for obtaining stormwater permits from the South Carolina Department of Health and Environmental Control ("DHEC") and from Horry County.<sup>2</sup>

The proposal to redevelop the South Course generated significant controversy among Plaintiff's residents.<sup>3</sup> Prior to 2002, Circle Drive properties within Phase II B suffered from flooding during significant storm events. Plaintiff asserts that the underlying basis of these multiple legal challenges relate to flooding concerns. However, it is undisputed that incidences of flooding resulting in damages to residential structures within and among Phase II B properties have diminished since 2002 as a consequence of new drainage infrastructure installed downstream of Phase II B to collect and retain stormwater. This infrastructure was a result of an initiative of Horry County to fund much needed drainage improvements in this area identified in the "Caropines/Deerfield Storm Drainage Study"<sup>4</sup> by the LPA Group, outside consultants hired by Horry County to assist in addressing these historic drainage problems.

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<sup>2</sup> Stormwater discharges from new development are regulated by DHEC and by Horry County and redevelopment of the South Course triggered a requirement to obtain an approval or permit from both entities.

<sup>3</sup> In addition to this bifurcated civil action, Plaintiff has challenged the issuance of DHEC permits authorizing the redevelopment. Deerfield Plantation Phase II B POA v. SCDHEC, Deertrack Golf, Inc., and Bill Clark Homes of Myrtle Beach, LLC, 08-ALJ-07-0221-C. Plaintiff was unsuccessful in this challenge before the South Carolina Administrative Law Court, and an appeal filed by Plaintiff is pending in the South Carolina Court of Appeals. In addition, Plaintiff challenged actions taken by the United States Army Corps of Engineers related to the South Course. Deerfield Plantation Phase II-B Property Owners Association, Inc. v. United States Army Corps of Engineers, et al., and Deertrack Golf, Inc., 4:09-cv-010023-RBH. Plaintiff was unsuccessful in this challenge and sought review by the Fourth Circuit Court of Appeals. The Fourth Circuit affirmed the District Court. (See unpublished opinion of Fourth Circuit Court of Appeals No. 11-1871, filed December 26, 2012.)

<sup>4</sup> Horry County hired the LPA Group to study the drainage issues and make recommendations on addressing drainage problems negatively impacting Phase II B. The LPA Group produced three reports and made multiple recommendations to the County. The County elected to fund and implement some of these recommendations and spent more than \$2,000,000.00 installing new drainage infrastructure, including the purchase of land for retention and the installation of new, larger pipes under Highway 17 Business downstream of the Phase II B outfall.

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In this action Plaintiff seeks a declaration by this Court that a drainage easement exists through the golf course benefitting the Plaintiff and that drainage through the golf course cannot be altered or changed without the consent of the POA and the homeowners. In conforming the pleadings to the evidence as presented, I find that Plaintiff seeks to establish an easement either by prescription, necessity, or prior use. Essentially, Plaintiff seeks to memorialize the drainage system currently in place – a system of ponds, ditches, and swales located on the South Course – such that no change to the drainage system may ever take place without Plaintiff's approval.

### **FINDINGS OF FACT**

1. The Plaintiff is a property owners' association for properties located in the Town of Surfside Beach, Horry County, South Carolina. Plaintiff seeks a declaration of relief related to real property situated in Horry County, South Carolina. Defendant is a corporation authorized under the laws of the State of South Carolina. Venue is proper in the Court of Common Pleas.
2. Defendant is the owner of the closed golf course known as the South Course, located adjacent to properties within Deerfield Plantation Phase II B. Plaintiff is the POA consisting of owners of properties in Phase II B.
3. Defendant offered the golf course for sale to Bill Clark Homes and Bill Clark Homes proposed redevelopment of the golf course as a residential subdivision. Bill Clark Homes obtained permits from DHEC and Horry County authorizing redevelopment based on stormwater management and drainage plans prepared by Bill Clark Homes' engineer, Thomas Bevins of ETS, Inc.

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4. The development plans approved by DHEC and by Horry County will provide drainage for Phase II B through the redeveloped lands but will alter the drainage pathways and change the drainage infrastructure currently in place at the golf course.
5. Most of the properties located in Phase II B drain into the infrastructure currently existing on the South Course. Such drainage is channeled and ultimately exits the South Course and Phase II B through an outfall located adjacent to Phase II B. Such drainage flows by way of a ditch and pipes into a detention pond structure and then under Highway 17, into Lake Elizabeth and Lake Dogwood, and ultimately to the Atlantic Ocean.
6. The flow of drainage upstream of Phase II B and of the golf course has, historically, always taken a path through the lands now known as the South Course. This path existed even prior to development in the area and within the identified 800-acre watershed that flows into the South Course<sup>5</sup>, based on the topography of Phase II B and the South Course in relationship to surrounding properties.
7. At least seventeen different POAs for neighborhoods situated in Deerfield Plantation, including Phase II B, drain into the golf course.
8. Plaintiff presented the testimony of POA President Frank Yelinko. Mr. Yelinko resides at 1022 Plantation Drive. Mr. Yelinko testified that during his tenure as POA President, and since he purchased his property in Phase II B in 1995, that Phase II B has on occasion participated in maintaining the drainage system associated with the South Course. Yelinko's testimony was general in nature and he did not identify any records of expenditures on behalf of the POA reflecting this participation.

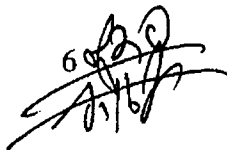
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<sup>5</sup> Defendant's expert, Thomas Bevins, P. E., identified an approximately 800-acre contributing drainage area for purposes of determining pre-development and post-development conditions on the South Course.

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9. Yelinko was personally involved in drainage improvements, including the repair and replacement of a collapsed pipe located on the golf course and extending into Phase II B.
10. According to Yelinko, any agreement to share in maintenance costs for drainage improvements or repairs on the South Course was between Phase II B POA and Gary Schaal, an employee and member of the entity that leased the South Course from Deertrack Golf, Inc.
11. Gary Schaal testified for Plaintiff that he leased and managed both the South Course and its companion golf course, the North Course, since 1981. The lease terminated in 2005 with the closure and potential sale of the South Course. Schaal acknowledged that the South Course was not economically viable during the last several years of his tenancy.
12. Schaal was a member and employee of South Carolina Golf Corporation and, later, S.S.I. Management Group, Inc., the Lessee of the South Course. Schaal acknowledged that the lease agreement between Deertrack Golf, Inc. and the Lessee included a provision that "the Lessee shall, in no event, however, have power, authority or right hereunder to incur or create any obligations in respect to said premises, buildings, or improvements, which shall create or constitute a lien or claim in favor of the Lessee or any third person against the rights, title and/or interest of the Lessors."
13. Schaal further acknowledged that under the terms and conditions of the lease with Deertrack Golf, Inc., that he, as Lessee, was financially responsible for maintenance and repair, including maintenance of the golf course drainage system.
14. Schaal coordinated with Phase II B as related to maintenance of the drainage system that affected properties in Phase II B. Such coordination was, according to Schaal, a business decision because many Phase II B property owners were also members of the golf club.



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Schaal perceived a mutual interest in maintaining drainage on the golf course. During the years of Schaal's tenancy, the POA contributed funds to certain drainage projects related to the golf course. However, Schaal's testimony was general in nature and neither he nor any other witness identified copies of any invoices, receipts, or other documents reflecting the cost-sharing arrangement that he described.

15. Schaal specifically recalled making changes on the golf course related to drainage repairs or improvements. Schaal relocated the 7<sup>th</sup>, 8<sup>th</sup>, and 9<sup>th</sup> holes and allowed changes to existing drainage ponds to accommodate drainage requirements for a development located immediately north of Phase II B. Schaal acknowledged that he had the right, as Lessee, to move or change drainage features on the golf course without permission of Phase II B.

16. Nelson Hardwick also testified for the Plaintiff. Mr. Hardwick is a licensed professional engineer in the State of South Carolina. He was recognized by the Court as an expert in civil engineering, including stormwater design. Mr. Hardwick served as an engineer and participated in the design of Phase II B and Phase II A. He worked with Deertrack Golf, Inc.'s predecessor, Deerfield Plantation, Inc.<sup>6</sup>

17. According to Mr. Hardwick, the drainage system on the South Course required frequent maintenance.

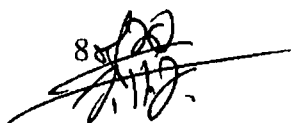
18. Hardwick testified that the drainage on the South Course was modified without permission of Phase II B or the property owners, including changing ponds to address off-site development, the expansion and rebuilding of specific golf holes, and the

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<sup>6</sup> It is undisputed that Deerfield Plantation, Inc., was a company owned by the Schaad family of Knoxville, Tennessee and that Deertrack Golf, Inc. is also owned by the Schaad family. It is further undisputed that there is no familial connection between the Schaad family and Gary Schaal, despite the similarities in the spelling of the names.

installation of additional swales and ditches to convey water into and off of the golf course.

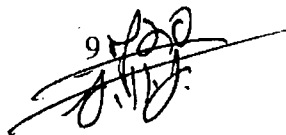
19. During the time that Hardwick was performing engineering related to development within Deerfield Plantation he understood that drainage between Phase II B and the golf course was by way of permission from the South Course owner, Deertrack Golf, Inc. Hardwick further testified that the South Course owner could alter or change the drainage pathways as desired so long as the changes proposed did not negatively impact Phase II B's drainage through the South Course.
20. Plaintiff's Exhibit 8, admitted into evidence, is the property report that was provided to all initial buyers within Phase II B. The report "covered 680 lots located in Horry County, S.C." The subdivision identified as the subject of the report is "Deerfield Plantation." It is clear from Exhibit 8 that the property owners' associations were responsible for the drainage system, but that responsibility only extended to the drainage system within the subdivisions, not on the South Course.
21. Plaintiff's Exhibit 8, which was provided by the developer to all initial purchasers, contains the following disclaimer under the section entitled Easements: "Subdivision is not subject to any type of flood control or flowage easements."
22. The Plat for Phase II B, recorded in the Office of the RMC at Book 67 page 56, depicts the South Course adjacent to the platted subdivision lots of Phase II B. The recorded subdivision plat includes the following reservation of rights by the developer: "All streets, easements and golf course areas shown on this plat are private and are not intended to be dedicated as public use" (emphasis added).

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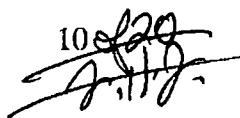
23. Plaintiff's witnesses Frank Yelinko, Louis Toth, and Mike Couture identified two flooding events, where floodwaters entered garages and residences within Phase II B, which had occurred since 1999.
24. Witness testimony stated that Phase II B properties were located in low lying areas dominated by limited, wetland-type soils and surrounded by development much of which occurred before government regulation of stormwater discharges. Additionally many homes in Phase II B were built using the construction technique of "slab on grade." As a consequence of these conditions Phase II B properties were flood-prone. There was no evidence that any direct actions undertaken on the South Course resulted in flooding and property damage to homes on Phase II B.
25. Plaintiff offered the testimony of Thomas Garigen, the Stormwater Manager for Horry County. Garigen explained that the drainage system installed for Phase II B pre-dated regulatory requirements and was sub-standard when constructed. Garigen further identified poor soils and low topography as conditions that contributed to flooding in Phase II B.
26. According to Garigen, Horry County staff has been watching the flooding situation in the Deerfield Plantation and Caropines areas closely, having spent more than \$2,000,000.00 to improve drainage in these areas. Garigen believed the drainage improvements were successful, as he has not heard complaints related to flooding in Phase II B for more than five years.
27. Garigen identified work done by Horry County's outside consultants, the LPA Group. The LPA Group prepared three reports and updated and revised their recommendations following the work done by Horry County to improve drainage. In addition, the LPA



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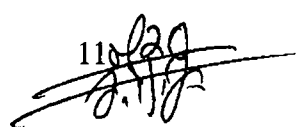
Group's findings and recommendations took into account the redevelopment proposed by Bill Clark Homes on the South Course. LPA concluded that redevelopment of the South Course would not negatively impact drainage.

28. Garigen has field-verified LPA's predictions, by inspecting the off-site detention pond installed by the County in the area referred to as the "Bi-Lo parking lot" following a significant storm event. Garigen's visual inspection confirmed that the water was flowing more effectively, as predicted by LPA, out of the golf course and Phase II B and through the drainage improvements designed to carry the water to the Atlantic Ocean.
29. Plaintiff offered the testimony of Mike Couture, a homeowner and resident of Circle Drive within Phase II B. Mr. Couture owns Deerfield Realty and is the broker in charge for the realty company. In addition, Mr. Couture manages several property owners' associations within Deerfield Plantation. Mr. Couture acknowledged, on cross-examination, that the associations that he managed were bound by the covenants, easements, restrictions, and by-laws of record related to each development. In addition, Mr. Couture stated that even though Phase II B drained through the South Course, the South Course owner had the right to change or alter the drainage pathway through the course, so long as proper drainage was still provided for Phase II B properties.
30. Plaintiff offered the *de bene esse* deposition testimony of Phase II B resident Louis Toth. Toth had previously served on the POA Board and testified that Phase II B helped the golf course with maintenance of the drainage system. But, when asked which entity was responsible for maintenance of the drainage system on the South Course, Toth replied that "the golf course" was responsible.

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31. It is undisputed that any shared maintenance arrangements of the drainage on the South Course were between the POA and Gary Schaal, the golf course tenant, who, under the terms and conditions of the lease with Deertrack Golf, Inc. could not bind or create any obligations of Deertrack Golf, Inc.
32. It is undisputed that even before the golf course and the subdivision were constructed, drainage flowed through the area now known as Circle Drive and onto the area occupied by the golf course before reaching the Atlantic Ocean.
33. It is further undisputed, based on the testimony of Plaintiff's witnesses, that the South Course drainage system has been altered and changed over the years without the written permission of Plaintiff and its members.
34. Mr. Garigen reviewed the drainage plans developed for Bill Clark Homes by ETS for the South Course. According to Garigen, the County asked ETS to be responsive to the concerns of the residents and numerous revisions were made to the development plans to address the comments and concerns of surrounding residents. Horry County also required Bill Clark Homes and ETS to ensure that drainage was not made worse for property owners in Phase II B and to take measures to improve drainage for Phase II B. According to Garigen, the approved drainage plans for the South Course improve existing drainage conditions for Phase II B residents.
35. Thomas Bevins testified as an expert for Defendant Deertrack Golf, Inc. Bevins explained that the current drainage system is an integrated system in which two tracts and two different land uses share one drainage system. According to Bevins such integration is not unusual and he provided other examples. Bevins is not aware of any legal

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impediments that prevent changes to an integrated drainage system, so long as the changes are approved by the applicable regulatory authorities.

36. Bevins explained that in its current, pre-development condition the drainage system on the South Course is not functioning efficiently. The ponds remain at or near capacity at normal water levels and have limited available capacity to retain additional stormwater. In addition, the existing interconnectivity through a system of pipes and ditches is not very efficient. The inefficiencies in interconnectivity and the limitations on the ponds could contribute to flooding within Phase II B.
37. The approved redevelopment plans for the South Course address the issues related to the ponds by installing a new system of ponds that will provide much more detention function than the existing ponds.
38. In addition, the approved redevelopment plans for the South Course include re-routing existing drainage that flows to the lowest point of the development through Circle Drive. Most of the drainage currently flowing through Circle Drive will be routed around Circle Drive.
39. Bevins incorporated all of the County's improvements and the LPA predictions in his assumptions that formed the basis for the design of the drainage system for redevelopment of the South Course.
40. Based on Horry County and DHEC requirements, the plans developed by ETS are designed to meet requirements for the 2-year, 10-year, 25-year, and 100-year storm events. The current drainage system, installed in or around 1980, was not designed to meet any specific standard or storm event.

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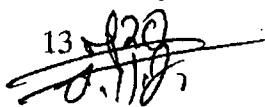
## CONCLUSIONS OF LAW

Based on these factual findings, this Court concludes as follows<sup>7</sup>:

1. This Court has jurisdiction over the subject matter of this civil action and over the parties in accordance with S.C. Code Ann. § 15-53-10, the uniform Declaratory Judgments Act.
2. The determination of the existence of an easement is a question of fact in a law action. The determination of the scope of an easement is an action in equity. Inlet Harbour v. S.C. Department of Parks, Recreation and Tourism, 377 S.C. 86, 659 S.E.2d 151 (2008).
3. "An easement is a right of use over another's property. Easements can arise by both express creation and by implication. Implied easements are based upon the theory that whenever one conveys property, he intends to convey whatever is necessary for the property's use and enjoyment. The purpose of an implied easement is to give effect to the intentions of the parties to a transaction, and because the implication of an easement in a conveyance goes against the general rule that a written instrument speaks for itself implied easements are not favored." Id. at 91, 659 S.E.2d at 154.
4. The intentions of the parties to the transaction are the overriding focus when examining implied easements. McAllister v. Smiley, 301 S.C. 10, 389 S.E.2d 857 (1990).
5. Plaintiff produced no evidence of an easement, written and or recorded, that provides for the rights that Plaintiff claims. The subdivision plat for Phase II B and the restrictive covenants governing Phase II B were admitted as evidence. The subdivision plat includes the following express easement, reserved to Defendant<sup>8</sup>: "In addition to easements shown, Deerfield Plantation Inc. dedicates for use as drains, swales, and pipelines a 10' easement, 5' each side of the line along all interior lot lines." And, the

<sup>7</sup> To the extent that any finding of fact is more appropriately characterized as a conclusion of law, it is so designated and to the extent a conclusion of law is more appropriately characterized as a finding of fact, it is so designated.

<sup>8</sup> The reservation was for the benefit of Deerfield Plantation, Inc., a predecessor to Deertrack Golf, Inc.

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plat includes the following note: "All streets, easements and golf course areas shown on this plat are private and are not intended to be dedicated as public use."

6. The recorded plat and the Declaration are applicable to Phase II B, not the South Course.
7. Plaintiff argued in the appeal of the zoning commission ruling, and continued in this case that it had an express easement to control drainage on the South Course. Plaintiff's argument was based on the Amended Declaration, recorded by Plaintiff in 1998 upon expiration of the initial Declaration. The un-appealed Order of the Honorable Benjamin H. Culbertson states that "Plaintiff misapprehends these Covenants and Restrictions which are applicable to the acreage that constitutes Deerfield Plantation Phase II B, not the Old South Golf Course. These Covenants and Restrictions do not create property rights for Plaintiff and its members in the Old South Golf Course." Order Affirming Decision of Horry County Planning Commission, filed July 10, 2009.
8. The clear expressions of intent at the inception of the development are significant for purposes of evaluating whether this Court should imply an easement. "The creation of an implied easement generally requires that the facts and circumstances surrounding the conveyance, the property, the parties, or some other characteristic demonstrate that the objective intention of the parties was to create an easement. The purpose of an implied easement is to give effect to the intentions of the parties to a transaction, and because the implication of an easement in a conveyance goes against the general rule that a written instrument speaks for itself, implied easements are not favored." Inlet Harbour, 377 S.C. at 92, 659 S.E.2d at 154. "The intent of the parties, as shown by all the facts and circumstances under which a conveyance was made, may give rise to an easement by implication." Id., citing Hamilton v. CCM, Inc., 274 S.C. 152, 158, 263 S.E.2d 378, 381

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(1980). "Whatever easements are created by implication must be determined as of the time of severance of the ownership of the tracts involved." Boyd v. Bellsouth Telephone Telegraph Co., Inc., 369 S.C. 410, 633 S.E.2d 136 (2006), *citing* Clemson Univ. v. First Provident Corp., 260 S.C. 640, 652, 197 S.E.2d 914, 920 (1973).

9. If any easement by implication is found, then this Court must determine the scope of the easement, that is whether it is an appurtenant easement or an easement in gross. An easement in gross is merely the right to use another's land for a specific purpose, such right being non-transferrable. An appurtenant easement inheres in the land and has one terminus on the party claiming it. Proctor v. Steedley, 398 S.C. 561, 730 S. E. 2d 357 (2012).
10. As is noted above, it was clear at the time of severance that the developer and owner of the South Course, Deertrack Golf, Inc.'s predecessor in interest Deerfield Plantation, Inc., expressly reserved rights to drainage through Phase II B but granted no rights to the South Course. Consequently, there was no expression of intent upon which this Court could imply a drainage easement.
11. As has been noted above, there are at least seventeen various HOA's which border and/or drain through the South Course. It strains credibility to believe that the parties would have intended that one HOA, Phase II B, would have the right to restrict changes in the golf course drainage system which could ultimately be to the detriment of other surrounding property owners and HOA's. As such, it is the most logical conclusion as to the intentions of the parties that, although the surrounding properties drain through the golf course, the rights of the golf course owner to relocate its ponds, swales, ditches and

other drainage features at its discretion is constrained only such that it not worsen the drainage of Phase II B.

12. The party asserting the right to an easement implied by prior use must establish the following: (1) unity of title; (2) severance of title; (3) the prior use was in existence at the time of unity of title; (4) the prior use was not merely temporary or casual; (5) the prior use was apparent or known to the parties; (6) the prior use was necessary in that there could be no other reasonable mode of enjoying the dominant tenement without the prior use; and (7) the common grantor indicated an intent to continue the prior use after the severance of title. Boyd, 369 S.C. at 417, 633 S.E.2d at 139.
13. The use that Plaintiff seeks to establish as a prior use is more than the use of the golf course for drainage. Plaintiff seeks to establish as prior use that the drainage system cannot be altered or changed without the express consent of Phase II B and the affected homeowners. Plaintiff's case for an implied easement by prior use fails on the sixth element of Boyd, the element of necessity, and on the seventh element, that the grantor indicated intent to continue the prior use.
14. With regard to the element of necessity, "[f]or an easement implied by prior use, necessity means 'there could be no other reasonable mode of enjoying the dominant tenement without this easement ...' Crosland v. Rogers, 32 S.C. 130, 133, 10 S.E. 874, 875 (1890); *see also* 25 Am. Jur.2d Easements and Licenses § 29 (necessity for easement implied by prior use generally means reasonable necessity which will contribute to enjoyment of the dominant estate); 28A C.J.S. Easements § 72 (implied grant of easement by prior use requires a reasonable degree of necessity for the enjoyment of the dominant



estate; it need not be absolute but must be more than mere convenience)." Boyd, 369 S.C. at 421, 633 S.E.2d at 141.

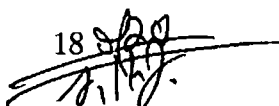
15. Plaintiff cannot demonstrate necessity to justify an implied drainage easement based on the fact that Defendant has always allowed drainage through the South Course. It is clear from the recorded restrictions and the undisputed testimony of the witnesses, and in particular Plaintiff's witnesses, that the POA maintains and controls the drainage system through Phase II B and Deertrack Golf, Inc. maintains and controls the drainage system through the South Course. Any implication to the contrary would defeat the clear intent of the parties at the time of severance of title.
16. Plaintiff's burden of establishing an easement by necessity is separate and distinct from a demonstration of necessity when implying an easement by way of prior use. "The party asserting the right of an easement by necessity must demonstrate: (1) unity of title, (2) severance of title, and (3) necessity." Id. at 418-419, 633 S.E.2d at 141. "The necessity requirement for an easement by necessity must be actual, real, and reasonable as distinguished from convenient, but need not be absolute and irresistible. ... The necessity element of easement by necessity must exist at the time of severance and the party claiming the right to an easement must not create the necessity when it would not otherwise exist." Id. at 420-421, 633 S.E.2d at 141. The distinction between this analysis, and the analysis for claim of easement by prior use, is that "the need required for an easement by prior use may be less than required for an easement by necessity." Id. at 421, 633 S.E.2d at 141.
17. Typically, implied easements by necessity are for access to land-locked parcels. Hayes v. Tompkins, 287 S. C. 289, 337 S. E. 2d 888 (1985); Graham v. Causey, 284 S.C. 339, 326

17. Hayes v. Tompkins  
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S.E.2d 412 (1995); Proctor v. Steedley, 398 S.C. 561, 730 S.E.2d 357 (2012); Pendarvis v. Cook, 391 S.C. 528, 706 S. E. 2d 520 (2011); Boyd v. Bellsouth Telephone Telegraph Co., Inc., 369 S.C. 410, 633 S.E.2d 136 (2006).

18. Plaintiff has failed to demonstrate necessity to have a drainage easement that cannot be changed without Plaintiff's, and others', permission. Defendant, a downstream property owner to Phase II B, has always accepted and conveyed storm drainage flowing from Phase II B. Defendant has never indicated that it would not accept and convey drainage from Phase II B. In the proposed and approved redevelopment plans for the South Course, Defendant has accommodated Plaintiff's drainage.
19. To establish a prescriptive easement, the party asserting the right must show: (1) continued use for 20 years, (2) the identity of the thing enjoyed, and (3) use which is either adverse or under a claim of right. Boyd, 369 S.C. at 419, 633 S.E.2d at 141. Additionally, a party claiming a prescriptive easement under a claim of right must show a substantial belief that he had the right to use the property based on the totality of circumstances surrounding his use. Paine Gayle Properties, LLC v. CSX Transp., Inc., 400 S.C. 568, 583-84, 735 S.E.2d 528, 537-38 (2012), citing Matthews v. Dennis, 365 S.C. 245, 250, 616 S.E.2d 437, 440 (Ct. App. 2005).
20. "In order to establish a claim of adverse possession, the claimant must prove by clear and convincing evidence his possession of the subject property was continuous, hostile, actual, open, notorious and exclusive for the statutory period." Millvale Plantation, LLC v. Carrison Family Ltd. Partnership, 2012 WL 5351169 at 5 (S.C. App. Oct. 31, 2012), citing McDaniel v. Kendrick, 386 S.C. 437, 442, 688 S.E.2d 852, 855 (Ct. App. 2009).

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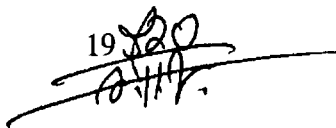
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The burden of proof of adverse possession is on the party relying thereon. Lyles v. Fellers, 138 S.C. 31, 136 S.E. 13 (1926).

21. To establish an easement by prescription Plaintiff must demonstrate continued, uninterrupted, and adverse use of the golf course for drainage for a period of twenty years. Simmons v. Berkeley Electric and Co-op, Inc., -- S.E.2d --, 2013 WL 1138834 (S.C. App. March 20, 2013).

22. The clear intent of the parties upon creation of Phase II B and the golf course, as expressed in the plat and in the recorded covenants and restrictions was for Deerfield Plantation, Inc., now Deertrack Golf, Inc., to maintain control over the South Course. Regardless, surface water has flowed from Phase II B through South Course and will continue to flow, although the conveyances may be altered or changed. Defendant has acknowledged that stormwater may flow from Phase II B through Defendant's property. Defendant has never denied drainage through the South Course. Thereby, the Plaintiff has failed to establish proof of a prescriptive easement.

This Court concludes that Plaintiff has failed to demonstrate the existence of a drainage easement, which cannot be altered without Plaintiff's written consent, by either prior use, necessity, or prescription. Any implication that Plaintiff can control drainage on the South Course would be inconsistent with the clear expressions and reservations of Defendant's predecessor at the inception of the golf course and Phase II B. To the extent that Defendant has a common law duty to facilitate drainage of upstream parcels through Defendant's property, that duty is enforced in part through the statutes and regulations of the South Carolina Department of Health and Environmental Control, embodied in S.C. Code Ann. § 48-14-10 *et seq.* (The Stormwater Management and Sediment Reduction Act), S. C. Code Ann. § 48-1-10 *et seq.* (The

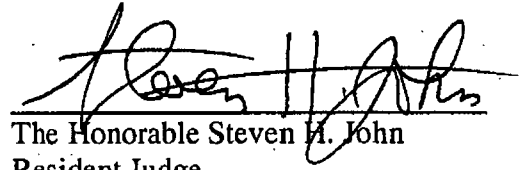
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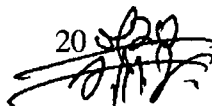
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Pollution Control Act). S.C. Code Reg. § 72-300 *et seq.* (Standards for Stormwater Management and Sediment Reduction), and S.C. Code Reg. § 61-9 (National Pollutant Discharge Elimination System). The evidence shows the Defendant has complied with these statutory and regulatory requirements by obtaining approvals for the proposed redevelopment of the South Course from DHEC and from Horry County. The Defendant has further acknowledged and planned for stormwater drainage from the Plaintiff through its property. Therefore, it is

ORDERED that Plaintiff's request for a Declaratory Judgment is hereby, DENIED, and this civil action is dismissed with prejudice.

June 20, 2013  
Conway, S. C.

  
The Honorable Steven H. John  
Resident Judge  
Fifteenth Judicial Circuit

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STATE OF SOUTH CAROLINA

BEFORE THE ADMINISTRATIVE LAW COURT

Deerfield Plantation Phase IIB Property Owners Association,  
Petitioner,  
vs.  
South Carolina Department of Health and Environmental Control and Deertrack Golf, Inc.,  
Respondents.

Docket No. 08-ALC-07-0221-CC

AMENDED AND SUPPLEMENTAL  
PREHEARING STATEMENT

OF  
PETITIONER

FILED

JAN 22 2009

SC ADMIN. LAW COURT

The Petitioner, Deerfield Plantation Phase IIB Property Owners Association, submits the following as its Amended and Supplemental Prehearing Statement in this matter:

1. The nature of this proceeding.

This proceeding is a contested case appeal of the decision of the South Carolina Department of Health and Environmental Control ("DHEC"), Office of Ocean and Coastal Resource Management, to issue a storm water permit and coastal zone consistency certification to Deertrack Golf, Inc., for the proposed residential development of the property formerly used as the golf course known as Old South Course in the Surfside Beach area of Horry County.

2. The statutory provision(s) conferring subject matter jurisdiction to the Administrative Law Court (Court) and other applicable statutes and regulations - specific, not general.

Subject matter jurisdiction: (1) S.C. Administrative Procedures Act, S.C. Code Ann. §§ 1-23-310, 1-23-370, 1-23-600; (2) the S.C. Coastal Zone Management Act, S.C. Code Ann. § 48-39-150; and (3) S.C. Code Ann. § 44-1-60 2006 Act No. 387.

Other applicable statutes and regulations: (1) the S.C. Coastal Zone Management Act, S.C. Code Ann. § 48-39-10, *et seq.*, and in particular §§ 48-39-10, 20, 30, 80, 90, 150; (2) the South Carolina Coastal Management Program, and in particular the policies set forth on pages III-14, III-15, III-16, III-17, III-73 and the stormwater management and mitigation policies of the 1993 Refinements to the Coastal Management Program; (3) the Stormwater Management and Sediment Reduction Act of 1991, S.C. Code Ann. §§ 48-14-10, *et seq.*; (4) Stormwater regulations, S.C. Code Ann. Regs. §§ 72-300 through 316; (5) S.C. Pollution Control Act, S.C. Code Ann. §§ 48-1-20, *et seq.*; (6) DHEC Regulations for NPDES permits, S.C. Code Ann. § 61-9.

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3. **The issues to be presented for determination, including any claims or defenses expected to be raised.**

1. Are there existing waters of the state and wetlands on the site of the proposed development?
2. Are the waters of the state and wetlands on the site connected to navigable waters of the United States by surface connections and are the wetlands thus federal jurisdictional wetlands?
3. Did the permit application erroneously state that there are no waters of the state or wetlands on the site?
4. Did DHEC issue the certification and permit without making a proper determination of the presence of waters of the state or wetlands on the property?
5. Will the proposed development exacerbate the existing flooding problems within Deerfield Plantation?
6. Does the proposed storm water management system for the proposed development properly assess the overall drainage area that will be impacted by the proposed development?
7. Will the proposed development permanently alter wetlands in violation of the South Carolina Coastal Management Program?
8. Will the project restrict or limit the continued use of a recreation open area or disrupt the environmental or aesthetic character of the area?
9. Are there feasible alternatives to the proposed development?
10. Does the proposed storm water management plan comply with the applicable statutes and regulations?
11. Does the proposed storm water management plan violate the Pollution Control Act by making discharges of storm waters and pollutants into waters of the state without pretreatment and buffers?
12. Are the ponds, lakes and channels on the subject property "waters of the State?"
13. If the downstream waters are waters of the State, what is the boundary line for the end point of these waters of the State?
- 14.

15. Such other and additional grounds as may be developed during the discovery process.

4. **A brief summary of the facts to be presented at the hearing.**

Deerfield Plantation Phase IIB Property Owners Association ("Deerfield POA") is a non-profit membership corporation, whose members are owners of homes within the subdivision known as Deerfield Plantation Phase IIB in Surfside Beach, Horry County, South Carolina.

Deerfield Plantation Phase IIB was developed around a golf course and the homes in the subdivision surround and are bordered by that golf course. The development was originally marketed as a golf course community.

Deertrack Golf, Inc. is the owner of the golf course known as Deertrack, which is surrounded by homes belonging to members of the Deerfield POA.

Deertrack Golf, Inc., has ceased operation of the Deertrack golf course (formerly a golf course open to the general public) and has entered into a contract to sell the golf course property to Bill Clark Homes or some other entity.

Deertrack Golf, Inc., filed applications for state and local permits to allow the conversion of the golf course to residential lots.

On February 28 and 29, 2008, the South Carolina Department of Health and Environmental Control ("DHEC") issued a coastal zone consistency certification and storm water permit to Deertrack Golf, Inc., for the proposed residential development.

Deerfield POA filed a timely request for review of said certification and permit by the Board of Health and Environmental Control (the "DHEC Board"), pursuant to S.C. Code Ann. § 44-1-60. On April 17, 2008, the DHEC Board informed Deerfield POA that the Board will not conduct a review of the permit and certification.

The proposed residential development would be built upon property that currently serves as the storm water management area for the homes within Deerfield Plantation Phase IIB. Stormwater draining from other nearby property, part of a larger Deerfield/Deertrack original development, also runs through the Deerfield POA property and the golf course. The storm water drainage system includes a series of ponds and ditches which ultimately have a direct surface connection to a swash that connects to the Atlantic Ocean.

The Deerfield/Deertrack development was built on the site of a swamp. As is, there have been occasions when the storm water management system has been overwhelmed and severe flooding has occurred, causing substantial and widespread damage to the homes owned by the

members of the Deerfield POA.

The plan for the proposed development of the golf course property calls for raising the elevation of the property that is now a golf course to an elevation several feet higher than the surrounding homes and roads – apparently in recognition of the severe potential for flooding. The proposed development would substantially alter the existing storm water management system for the existing properties, including the alteration of many acres of wetlands.

The ponds and ditches that are on the property are wetlands as defined by federal and state law. The wetlands are federal jurisdictional wetlands due to the surface connection to navigable waters of the United States – the Atlantic Ocean; they are also “waters of the State” under the SC Pollution Control Act and DHEC Regulations 61-68 and 61-9. These waters and wetlands support substantial populations of birds, turtles and other wildlife, add to the scenic beauty of the neighborhood and for many years have added to the quality of life within Deerfield Plantation.

Despite the presence of substantial wetland areas on the property, the application filed by Deertrack Golf, Inc., has claimed in its permit applications that there are no wetlands on the site. Deerfield POA has been informed that the US Army Corps of Engineers signed off on the lack of wetlands without making a visit to the site. Deerfield POA has also been informed by DHEC and OCRM that the state agency is relying upon the Corps wetland delineation. DHEC and OCRM have not independently verified whether the property contains wetlands, and have approved the permit and certification for this project based on the property containing zero wetlands.

Despite the Corps delineation and the state agency decisions, the property plainly contains wetlands. The property has standing water in ponds and ditches on a constant basis, and wetland species of plants are growing in the ponds and ditches. As soon as Deerfield POA can visit the property with its wetlands consultant, the POA will be able to demonstrate that wetland soils are also present, and thus that all three characteristics of wetlands are present.

The residents of Deerfield Plantation have experienced serious flooding in the past. If the elevation of the golf course property is raised by four to six feet – as is proposed in the permit applications submitted by Deertrack Golf, then the members of the Deerfield POA will experience even worse flooding problems. The development as proposed would also destroy the wetland habitat that currently serves as an amenity to the existing homes and as part of the existing storm water management system.

There are feasible alternatives to the proposed development: continued operation of the property as a golf course, and other, less damaging development plans for the golf course site. The development plan proposed in this case attempts to maximize the number of lots while filling wetlands and destroying the natural resources of the area, elevating the area of proposed development to a level several feet above the surrounding development and exacerbating the existing flooding problems in this area.



We also expect the evidence to show that the stormwater management plans are flawed and do not comply with the state stormwater act and regulations, and do not comply with the requirements for the general permit under the NPDES permit program.

**5. The action requested of the Court and a detailed statement of the law which supports the requested action, including statutory and/or case citations.**

The Petitioner requests that the Court reverse the agency decision to issue a permit and certification to Deerfield Golf, Inc.

The law which supports reversal is as follows:

- the project proposes to permanently alter wetlands for residential development, in a known flood hazard area, in violation of Coastal Management Program policies found at page III-16. See S.C. Code Ann. § 48-39-80; *South Carolina Wildlife Federation v. South Carolina Coastal Council*, 296 S.C. 187, 371 S.E.2d 521 (1988).

- the project proposes to utilize existing wetlands as a component of the stormwater management system for the project, but the necessary state and federal wetlands permits and certifications have not been obtained, in violation of Storm water regulation 72-307.C.(7).

- the project will cause significant, long-term flooding of the existing adjacent homes, in violation of the guidelines for evaluation of all projects as set forth on page III-14 of the Coastal Management Program. S.C. Code Ann. § 48-39-80.

- the project will restrict or limit the continued use of a recreation open area and disrupt the character of the aesthetic and environmental natural resources of the area, in violation of the policies found on page III-73 of the Coastal Management Program. S.C. Code Ann. § 48-39-80.

- the project is inconsistent with the state policies set forth in the Coastal Zone Management Act, S.C. Code Ann. § 48-39-30, § 48-39-80.

- the project violates the state stormwater management act and regulations and the SC Pollution Control Act and DHEC Regulations 61-68 and 61-9.

**6. A summary of any motions expected to be raised at the hearing and the appropriate authority underlying the motion.**

No motions have been identified to date.

**7. A list of proposed witnesses and exhibits.**

**Witnesses:**

Jill Stewart

Tara C. Maddock

Shannon Hicks

Frank Yelinko

Cail Brown

Ed Booth

Bill Megert

Members of the Deerfield POA

Jake Duncan

Tom Garigen

Jeff Thompson

William Dunn

Nelson Hardwick

Steve Powell

All witnesses listed by all other parties

Petitioner will identify additional witnesses, including expert witnesses, by a supplement to this statement as soon as they are secured

**Exhibits:**

All documents appearing in DHEC/OCRM files related to this permit and the decision to extend the construction deadline

All documents appearing in the Horry County public records related to this property and

related to development plans submitted by or on behalf of Deertrack Golf, Inc.

Maps and photographs of the subject property and surrounding area

Resume of Jake Duncan

Plans and documents prepared by ETS for Deertrack and Bill Clark Homes

Transcripts of depositions of Jeff Thompson, Tara Maddock, Shannon Hicks, Jeff Farrell and Norman Boatwright, and all exhibits to these transcripts

Horry County soil survey

1987 Corps delineation manual

NPDES general permit applicable to this project

Documents submitted to Corps of Engineers relating to wetland delineation including large plan sheets depicting this property

Contract between Deertrack and Bill Clark Homes related to subject property

All exhibits listed by any other party

Petitioner will supplement this list as additional exhibits are identified

**8. A statement regarding the necessity for discovery, if any.**

This is a relatively complex case that will require Petitioner to engage the services of several expert witnesses, who will need to inspect the site and review voluminous documents. Petitioner has served Respondents with a set of standard interrogatories, a request for production of documents, and a request to enter the land for purposes of inspection and testing. Petitioner anticipates needing to take several depositions. Allowing sufficient time for discovery will likely help narrow the issues for trial.

**9. Whether the party deems it necessary by the undersigned Judge to conduct a Pre-Hearing Scheduling Conference or issue an order regarding motions, discovery, etc.**

Not certain at this time.

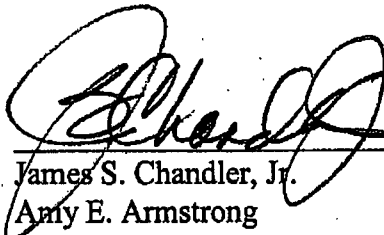
**10. The estimated time required for the hearing.**

Two to three days.

11. Any dates in the next ninety (90) days when you will not be available for a hearing.

The hearing is set for January 29-30, 2009.

Respectfully submitted,



James S. Chandler, Jr.

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Property Owners Association

Georgetown, South Carolina

January 15, 2009

STATE OF SOUTH CAROLINA

BEFORE THE ADMINISTRATIVE LAW COURT

|                                                                                                                                 |   |                              |
|---------------------------------------------------------------------------------------------------------------------------------|---|------------------------------|
| Deerfield Plantation Phase IIB Property Owners Association,                                                                     | ) | Docket No. 08-ALC-07-0221-CC |
|                                                                                                                                 | ) |                              |
|                                                                                                                                 | ) |                              |
| Petitioner,                                                                                                                     | ) |                              |
| vs.                                                                                                                             | ) | <b>MOTION FOR NEW TRIAL</b>  |
|                                                                                                                                 | ) | <b>AND</b>                   |
| South Carolina Department of Health and Environmental Control, Deertrack Golf, Inc., and Bill Clark Homes of Myrtle Beach, LLC, | ) | <b>TO ALTER OR AMEND</b>     |
|                                                                                                                                 | ) |                              |
| Respondents/Intervenor.                                                                                                         | ) |                              |

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TO: HONORABLE JOHN D. MCLEOD AND THE RESPONDENTS AND THE INTERVENOR AND THEIR ATTORNEYS:

PLEASE TAKE NOTICE that the Petitioner hereby moves the Court, pursuant to Rule 29 of the Rules of Procedure for the Administrative Law Court and pursuant to Rule 59, SCRCP, for a new trial and for an order altering and amending the Final Order and Decision issued by the Court on June 9, 2009, which was received by the Petitioner's counsel on or after June 10, 2009.

The basis for this motion and the specific alterations and amendments sought are set forth below:

Motion for New Trial, Rule 59(a), SCRCP.

1. The Petitioner moves for a new trial on the grounds that the Court's evidentiary rulings, coupled with the findings and conclusions of the Final Order and Decision, caused a fundamental failure of justice in this case. The Order on Respondent's and Intervenor's Motion in Limine dated February 26, 2009, barred the introduction of any evidence of current or past federal jurisdiction pursuant to the Clean Water Act over "waters of the United States." At trial, the Court reaffirmed its ruling that the Petitioner could not introduce evidence relating to "waters of the United States." Yet in its Final Order and Decision, the Court made findings of fact and conclusions of law relating to "waters of the United States" and the extent of U.S. Army Corps of Engineers jurisdiction over "waters of the United States" – see Findings of Fact numbers 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 23, 24, 30, and Conclusion of Law numbers 7. By barring Petitioner from presenting evidence on the issue of "waters of the United States," and by making a series of confusing rulings about admissibility of evidence and vaguely striking unspecified portions of Petitioner's evidence, yet making specific factual findings on the issue of "waters of

the United States,” and by setting forth a conclusion of law that “It is uncontested that the U.S. Army Corps of Engineers determined that there are no waters of the United States on the site,” the Court has made this contested case hearing fundamentally unfair, leading to a fundamental failure of justice in this case.

2. The Final Order and Decision ignores the testimony of Jake Duncan in the form of his deposition transcript which was admitted into evidence as Petitioner’s Exhibit 84. This testimony of Jake Duncan, coupled with Finding of Fact Number 84, which states that the ponds on the golf course property connect to a “channel leading out of the development” and then to a “another pond, and is then released into Lake Elizabeth, and then Lake Dogwood, and finally into the Atlantic Ocean,” show that there is a direct surface water connection between all of the ponds on the golf course property to the Atlantic Ocean, and thus all of these waters are in fact “waters of the United States.”

3. The Final Order and Decision ignores the testimony of Norman Boatwright indicating that he has no idea whether the ponds on the site were dug from wetlands or from high ground; that he found hydric soils in the majority of samples he took; that he took no hydrology data at the site except “visual data” – he “took a look at it;” that he found hydrophytic vegetation growing in the ponds; that he does not recall whether hydrophytic vegetation was growing in the channels connecting the ponds; that his report to the Corps of Engineers called the site a “drained wetland;” that the Horry County soil map for this property shows an intermittent stream on the golf course property; that all of the ponds and ditches were connected together; that he doesn’t know the definition of a “water of the State;” that he found standing water in the ponds and channels on the site, so that whatever alteration of hydrology occurred, it didn’t remove all standing water; that if the ponds and channels connected to the ocean, he would “need to read up on the guidance to answer . . . correctly” whether the connection made a difference; and that his report and testimony stated that he found ditches and ponds on the site and that “it’s an easy inference to know that they’re going to have hydrophytic vegetation in them.” The Final Order and Decision also ignores that these points only confirm the testimony of Jake Duncan that the ponds and channels are “waters/wetlands of the United States.”

Motion to Alter or Amend, SCRCP 59(e)

4. The Final Order and Decision erroneously states that Jake Duncan “made no determinations that any part of the site was currently a wetland,” when the evidence shows that Mr. Duncan’s testimony and report shows that he considered all of the channels and ponds/lakes to be “waters/wetlands of the United States.”

5. The Final Order and Decision erroneously makes numerous findings based on the Corps’ wetland delineation manual despite the fact that the manual is a technical document that has not been adopted by any state or federal regulation.

6. The Final Order and Decision ignores the fact that the Corps’ wetland delineation

contact recreation, fishing, and the survival and propagation of a balanced indigenous aquatic community of fauna and flora. The filling of ponds and the extensive alteration of others will violate these requirements.

12. The Final Order and Decision errs by calling Regulation 61-68(E)(4)(a) a "general" provision while calling Regulations 72-301(11), 72-305(B)(3), 72-305(B)(5) and 72-307(C)(5) "specific" provisions. Regulation 72-301 is merely a definition. Regulations 72-305(B)(3), 72-305(B)(5) and 72-307(C)(5) refer to the "construction" of stormwater ponds and say nothing about pre-existing ponds that are waters of the State. The existing ponds, lakes and channels are "waters of the State" and Respondents can point to no permit, statute, or regulation under which they were created as exempting them from the pretreatment requirements of Regulation 61-68. The Final Order and Decision erroneously would allow the use of "waters of the State" as "measures to control pollutants in stormwater discharges during construction" and "after construction" simply because the regulations allow the **construction** of ponds to provide such pollution control. Such a ruling violates Regulation 61-68(E)(3), which states: "No waters of the State shall be used for the sole or principal purpose of transporting or treating wastes."

13. The Final Order and Decision ignores testimony of Norman Boatwright and Jake Duncan stating that there is hydrophytic vegetation around the fringes of the ponds and in the channels connecting the ponds, and ignores the fact that this development proposes to fill the channels and some of the ponds, requiring application of the Coastal Management Program policies for residential development.

14. The Final Order and Decision ignores the terms of the NPDES general permit, which also prohibit the use of existing waters of the State in the manner proposed by this developer, as set forth in paragraphs 12 through 17 of the proposed order submitted by the Petitioner.

15. The Final Order and Decision ignores uncontroverted evidence that Horry County has only partially implemented the recommendations of the LPA Group and that the LPA Group's model was not calibrated to known flood data;

16. The Final Order and Decision ignores the fact that no witness was able to verify how much rainfall was received in the Deerfield area in October 2008 and that the rainfall amounts mentioned in the Final Order and Decision were from distant weather stations, and also ignores the fact that the area has experienced years of drought conditions.

17. The Final Order and Decision in paragraph 69 of its Findings of Fact erroneously states that "all 1,100 acres of LPA's watershed discharge through an outlet downstream of Lake Elizabeth and Lake Dogwood." There is no evidence supporting this finding.

18. The Final Order and Decision, by focusing on "Node 27" erroneously ignores the fact that all waters of the "Dogwood Lake Watershed," including the Deerfield property and many other surrounding properties, compete for drainage through restrictive structures that cannot

handle the entire runoff from this watershed.

19. The Final Order and Decision erroneously states that Steve Powell overlooks changes in the drainage infrastructure; the evidence does not support this statement and is in fact directly contrary to it.

20. The Final Order and Decision erroneously states that LPA has "attempted to calibrate" its model; there is no evidence to support this statement.

21. The Final Order and Decision erroneously states that Tom Garigen testified that "four inches of rain fell in a two hour period in October 2008, flowed into Node 27," when the evidence shows that Mr. Garigen does not have a specific measure of the amount of rainfall that fell within the watershed leading to Node 27. Garigen based his statement of a "serious storm" merely upon the dramatic rise in water level and not on a specific measure of rainfall within the watershed, and admitted that the rainfall could have been less than a 2-year storm.

22. The Final Order and Decision erroneously places great weight on the testimony of Tom Garigen, and states that his testimony was used in evaluating Steve Powell's testimony, when Garigen was not qualified as an expert and Garigen's "observations" were not verified with any actual rainfall data.

23. The Final Order and Decision erred in considering it permissible for DHEC to fail to apply "the standards generally applicable to waters of the State," particularly where DHEC failed to present any testimony of exactly what regulations it applied, and where the only DHEC witness admitted in her deposition an unfamiliarity with regulations defining "waters of the State" at the time of the permit decision.

24. The Final Order and Decision ignores the violations of Regulation 61-9.122.26 as set forth in the proposed order of Petitioner.

25. The Final Order and Decision erroneously deemed regulations 72-300 and 61-9.122.26 as more recent legislative enactments than Regulation 61-68, but ignores the fact that Regulation 72-300 was adopted in 1992 and Regulation 61-68 has been re-written several times since 1992, and both Regulation 61-122.26 and Regulation 61-68 were re-written in 2008. The Final Order and Decision also erred in applying the rules of interpretation because there is no need to favor one regulation over another when the regulations can be applied in full and in harmony. The Final Order and Decision makes no effort to apply the regulations in full, which in fact are not in conflict, and when applied in full prohibit the filling and use of existing waters of waters of the state as stormwater treatment ponds. The Final Order and Decision also erroneously describes the idea of simply not applying Regulation 61-68 as a means of "constru[ing] the potentially conflicting requirements in a manner that reconciles any inconsistency;" the Order makes no attempt at all to reconcile the regulations but instead simply rejects Regulation 61-68.

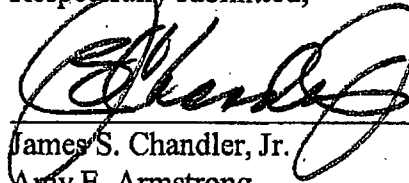


26. The Final Order and Decision erroneously renders conclusions of law regarding the presence of "waters of the United States" on the subject property, despite repeatedly preventing the Petitioner from presenting evidence on this issue and then ignoring evidence on this issue finally presented by the Petitioner.

27. The Final Order and Decision erroneously failed to make findings and conclusions as set forth in the proposed order of the Petitioner.

WHEREFORE, the Petitioner prays that the Court either grant a new trial or rescind the Final Order and Decision of June 9, 2009, and alter and amend the Final Order and Decision to reflect the proposed order submitted by the Petitioners.

Respectfully submitted,



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June 22, 2009

STATE OF SOUTH CAROLINA  
ADMINISTRATIVE LAW COURT  
Docket No. 08-ALJ-07-0221-CC

Deerfield Plantation Phase IIB  
Property Owners Association,

Petitioner,

v.

South Carolina Department of  
Health and Environmental Control  
and Deertrack Golf, Inc.,

Respondents,

and

Bill Clark Homes of Myrtle Beach,  
LLC,

Intervenor.

**COPY**

**ADMINISTRATIVE HEARING**

\*\*\*\*\*

**DAY ONE OF THREE**  
**Tuesday, March 10, 2009**  
10:02 a.m. - 4:35 p.m.

The hearing before the Honorable John D. McLeod was taken at the Edgar A. Brown Building, 1205 Pendleton Street, Suite 224, Columbia, South Carolina, on the 10th day of March, 2009 before Andrea R. Taylor, Court Reporter and Notary Public in and for the State of South Carolina.

1 Honor, right now my objections are to Exhibit  
2 9, just because I need a chance to look at it,  
3 and Exhibit 7.

4 **THE COURT:** Nine and 7 and everything that Mr.  
5 Chandler has enumerated will be admitted  
6 without objection. You think you've got that  
7 pretty clear?

8 **COURT REPORTER:** Uh-huh (affirmative response).

9 (Petitioner's Exhibit Numbers 1, 2, 3, 4, 8A-D, 10,  
10 11A and 11B, 12 and 13-78 are admitted into  
11 evidence.)

12 **MR. CHANDLER:** Your Honor, for the convenience of  
13 the Court, we have a list of our exhibits that  
14 we've also provided to the court reporter and  
15 counsel. A number of the exhibits are in this  
16 notebook, including all of the photographs.  
17 This is Exhibit 7, which we didn't put in here.  
18 It's all the public comments. And then these  
19 are the large plan sheets that we have, as well  
20 as Exhibit 12. And these are extra copies  
21 beyond what have already been given to the  
22 court reporter. The only thing that's not  
23 included in that is Petitioner's Exhibit 10,  
24 which we've only got one copy of.

25 **MR. YELINKO - DIRECT EXAMINATION BY MR. CHANDLER:**

1 Q: Mr. Yelinko, would you tell us your full name.

2 A: Frank Yelinko.

3 Q: And, Mr. Yelinko, where do you live?

4 A: 1022 Plantation Drive, Deerfield.

5 Q: Okay. And where is that in terms of its  
6 location in South Carolina?

7 A: It's in Horry County. It's just west of  
8 Surfside Beach.

9 Q: Okay. So your mailing address would be  
10 Surfside Beach?

11 A: It's Surfside Beach post office.

12 Q: Okay. But you're outside the city limits of  
13 Surfside Beach?

14 A: We're in Horry County; that's correct.

15 Q: And how long have you lived there?

16 A: Well, I moved there in late December of '05.  
17 I purchased a lot to build a house, so there  
18 were a lot of preparations to do. My house up  
19 in New Jersey was sold, so it was some  
20 transporting back and forth. But it was late  
21 '05 when I rented a place.

22 Q: And are you married?

23 A: I am.

24 Q: And do you have any children?

25 A: I have one son.

1 Q: Okay. And where is he?

2 A: He's in New Jersey.

3 Q: How old is he?

4 A: He is 46.

5 Q: Okay. Now, where do you work?

6 A: Right now, I am retired.

7 Q: And what are you retired from?

8 A: I'm retired from the construction industry,  
9 basically.

10 Q: Okay. Bear with me.

11 **MR. CHANDLER:** I beg the Court's indulgence just one  
12 minute. I should have got a document here.

13 Q: Now, when you say the construction industry,  
14 can you kind of walk me through ... well, let's  
15 start out, what's your educational background?

16 A: I don't have a degree in any particular area.  
17 I took engineering courses for two years off  
18 and on. I also attended the Dover Law School  
19 for two years. Most of my education was  
20 onsite, working with professionals.

21 Q: Okay. And when did you start working in the  
22 construction business?

23 A: 1965.

24 Q: And what did you start out doing?

25 A: I worked for a company out of Philadelphia that

1 was, at that time, building strip malls. And  
2 my job was as an assistant superintendent.

3 Q: And what kind of responsibilities did you have?

4 A: It was everyday responsibilities of getting the  
5 job up and running. Every day you had to get  
6 the job up and running, usually by 7:00 in the  
7 morning.

8 Q: Okay. And how long did you pursue that line of  
9 work?

10 A: I worked for Tomae for approximately, between  
11 five and six years.

12 Q: Okay. When you say get the job up and running,  
13 what kind of people did you have to supervise?

14 A: Well, the first thing you do in the morning is  
15 you have to get all of your excavating  
16 equipment up and running. Most of them were  
17 diesel operated, so it took, especially up  
18 North in the cold months, took a little while  
19 to get the equipment up and running. You make  
20 sure all your subcontractors were, you know, up  
21 to date every day as to what, how we were  
22 moving forward that particular day, what ...  
23 depending on the job we were working.

24 Q: Okay. So you were overall responsible for  
25 making sure the job got built?

1 A: Well, yeah, sort of. I was the junior. There  
2 was senior engineer over me.

3 Q: And after you left that job, where did you go  
4 to work?

5 A: I went to work for a company that I became a  
6 partner with. And they were doing basically  
7 residential construction. It was a company  
8 that started out known as Scott Valley Homes.  
9 We basically did all our work in northern New  
10 Jersey. And then we merged with two other  
11 companies and created a company called the  
12 House of Scott, Limited, which we also did  
13 shopping center work, strip malls. We did a  
14 lot of remodeling of shopping centers.

15 Q: Okay. And what was your role in that company?

16 A: I was the project coordinator. We had an  
17 engineer working ... one of the partners was an  
18 engineer by the name of Louis Feder, and I  
19 worked under Louis, basically, really following  
20 his direction as to what he needed to be done  
21 in any particular job. A lot of the jobs we  
22 had were a lot of de-watering jobs. Most of  
23 the commercial work we did was in low-lying  
24 areas with a lot of swamp-type land, so we had  
25 to work on de-watering before we could begin

1 construction.

2 Q: Okay. And you participated in whatever efforts  
3 were made to de-water and prepare the land for  
4 construction?

5 A: Yes, sir.

6 Q: And how many projects did you work on while in  
7 this job?

8 A: I'd say 20.

9 Q: Okay. And what size projects are we talking  
10 about?

11 A: Anywhere from six units up to 120 to 125 units.

12 Q: Okay. And when ... how long did you stay in  
13 that job?

14 A: Until 1974. We got caught in an economic  
15 catastrophe and we had to close the company.  
16 That was when they had the oil embargos and you  
17 couldn't get fuel. We couldn't get fuel to  
18 operate the equipment. Plus the mortgage side  
19 of it, something like what we're going through  
20 today, the banks just started to pull  
21 commitments.

22 Q: Okay. And so what did you end up doing next?

23 A: I didn't do anything for about two years.

24 **THE COURT:** Excuse me. He gave a date, but he  
25 didn't say how long he worked there. How long



1 did you work there?

2 A: I worked there about ... I was a partner about  
3 four and half years.

4 **THE COURT:** Excuse me, Mr. Chandler.

5 **MR. CHANDLER:** That's all right.

6 Q: Okay. So a couple of years you were basically  
7 not working?

8 A: I was doing some side jobs for a lumber  
9 company. It was a very large lumber company.  
10 They had three yards and they had projects.  
11 What they used to do was lend money to  
12 builders, small builders. In essence, that  
13 builder would buy their lumber from that lumber  
14 company. And they ended up taking over jobs,  
15 so they had a lot of projects. And I ... the  
16 gentleman that was the head of it was a man by  
17 the name of Manny Solandz. And he was nice  
18 enough to give me some work to finish up some  
19 of these buildings.

20 Q: And did you later begin regular employment with  
21 another company?

22 A: From there it was ... was touch and go with  
23 different projects. We were, you know, moving  
24 into a period where the mortgage industry  
25 wasn't coming back, interest rates were up into

1 the 20 percent range. So it was very  
2 difficult. What I actually did was I made a  
3 contract arrangement with Mr. Solandz for  
4 several lots that he had, and he financed me to  
5 put up houses. We were building homes. And  
6 that went on for about four years, I'd say, up  
7 until close to around 1980.

8 Q: And then what did you do?

9 A: In the '80s, it was very interesting. All of  
10 a sudden, come 1981, '82, money became  
11 available. So I went into partnership with  
12 another gentleman to build several homes, and  
13 that lasted until probably '84.

14 Q: Okay. And then what did you do after that?

15 A: I operated, like, as an independent contractor.  
16 I put out resumes as to work that I had  
17 performed in the past. And I had the Ramapo  
18 Bank of Wayne, New Jersey, contact me, and they  
19 had foreclosed on several large builders. And  
20 I had experience when I worked with Tomae  
21 Brothers on de-watering projects. And they had  
22 a project called Mohawk View Estates, which was  
23 a very pristine ... Lake Mohawk was a pretty  
24 pristine lake, a lot of environmental  
25 considerations. But they had huge wetlands on

1. this property. So they hired me, the bank  
2 hired me to come in and see if I couldn't  
3 coordinate with the environmentalist that did  
4 the original work, which was a Dr. John Crow,  
5 and see if we could come up with a plan as to  
6 meet the environmental considerations so we  
7 wouldn't take our stormwater runoff and  
8 contaminate Lake Mohawk, which was ... Lake  
9 Mohawk was a very upscale area and they really  
10 had some tough, tough laws in place,  
11 environmental laws. So I worked with John and  
12 we came up with a plan that was finally  
13 accepted by the state. And I built ... I built  
14 that job.

15 Q: And how big a job was that?

16 A: It was a ... well, it was originally planned  
17 for 230 homes and I think we ended up building  
18 somewhere around 125.

19 Q: And then how long did that project last?

20 A: That project lasted until 1989.

21 Q: And did you go to work for another company at  
22 that time?

23 A: Then I went to work for the last company. It  
24 was Kushner Companies. Kushner ... the head  
25 engineer at Kushner Companies was a fellow by

1 the name of Woody Solandz. And he contacted me  
2 to come down for an interview because Kushner  
3 Companies had some financial dealings with the  
4 Ramapo Bank and they knew of the work I was  
5 doing with Dr. John Crow. So I went down for  
6 an interview. And they had a very interesting  
7 job that happened to be with another lake. The  
8 difference between Lake Mohawk and this other  
9 project was there was no housing on the project  
10 that Kushner had. And they wanted to attempt  
11 to build housing around this lake. It was very  
12 pristine. It was all natural; it was never  
13 disturbed. And we spent a few years working  
14 out an environmental plan and it was ... that  
15 was one of the toughest jobs I ever worked on.  
16 But we ended up building there. And that was  
17 another job where their original conceptual was  
18 for like 170 some units, and we ended up  
19 building 75 units after it was all said and  
20 done. And I worked for that company up until  
21 1995. I did a lot of different projects.  
22 Every project they sent me on was a trouble  
23 project. It was either elevation grades, we  
24 had wetland issues, we had flooding issues, we  
25 had side slope issues. It was very tough.

1 Q: Okay. Is that because you were trouble or they  
2 just sent you to the trouble jobs?

3 A: They sent me to straighten the trouble out. My  
4 job was to try to come up with solutions to  
5 work these projects out.

6 Q: Okay.

7 A: I mean, I can give you a lot of different  
8 examples, I don't think the court is really  
9 interested in, you know, specific individual  
10 problem jobs. But there are ... in the  
11 construction industry there ... most jobs ...  
12 let me try to explain it this way. Once you  
13 have all of your permits and you start on the  
14 site, I have never had a project where we  
15 started on the site and it went the way the  
16 engineer planned it. It's one thing to plan on  
17 paper. It's another thing when you get out on  
18 the site. And one of the main reasons for that  
19 is you don't know what's underground. And the  
20 engineer that designs it, I mean, he's taking  
21 the best data that he has available to him at  
22 that time and he's planning around that. But  
23 I ... there's ... I have never had a job where  
24 we did not have to call in the local permitting  
25 agency and say, hey, look guys, w got a ... we

1        have a problem here. We need to work it out.  
2        And in most cases, I'd say 90 percent of the  
3        cases, these problems can be worked out onsite.  
4        The problem that I always had was, when we got  
5        into that ten percent area where there were  
6        severe cases, and we had ... and we worked it  
7        out, to me we were working it out behind the  
8        scenes. In other words, we never had to go  
9        back to any other permitting agency and say,  
10       hey, we have a problem here, we need to re-  
11       apply, or we need to resubmit. The local  
12       permitting agency always seemed to want to work  
13       it out onsite. And I had a problem with that  
14       in some cases. In fact, there was one shopping  
15       center case that it was a real, real serious  
16       problem because we had underground fuel tanks  
17       and this was after the project was two-thirds  
18       completed and now we had fuel leaking down into  
19       a water supply. And that was really a bad, bad  
20       scene. And they took care of it onsite. And  
21       I just thought it was wrong. But anyway, they  
22       ... there are a lot of things that happen on  
23       the site. My reputation always was that when  
24       the job was completed, there was no aftermath;  
25       there was no liability. I was very fortunate,

1 knock on wood, that we never had a liable suit  
2 against us or a liable violation against us.

3 Q: Now, these couple of projects you mentioned  
4 that started out with a higher number of units  
5 and ended up with a lower number of units, how  
6 did it come about that you ended up with a  
7 lower number of units?

8 A: When you do your preliminary design work, what  
9 you're usually doing, or what the engineer or  
10 planner -- in a lot of cases we had land  
11 planners working along with our engineers --  
12 what you're trying to do is meet whatever the  
13 zoning requirements are. So if the zoning says  
14 you're allowed five units to the acre, so you  
15 see on your preliminary, can I get five units  
16 to the area, to the acre. And then when you do  
17 your preparation of investigating the site and  
18 you see areas where you might have a problem,  
19 in my case that was my job, to come back to the  
20 land planner and the engineer and say, hey,  
21 look guys, we have this problem out there  
22 that's not showing up. And a lot of times we'd  
23 make a site visit and we would go over, you  
24 know, that particular circumstance, whether it  
25 was water, wetlands, rock outcroppings or

1           whatever, and then we would have to reevaluate  
2           the number of units. But then when you run  
3           into your environmental issues, the  
4           environmental laws, and this isn't a knock  
5           toward South Carolina or anybody else, I just  
6           ... the environmental laws up North are ten  
7           times as strict as they are down here. And I  
8           believe the reason for that is you probably  
9           don't have as congested existing areas like you  
10          do up ... up North you have a lot of  
11          congestion. I mean, when you're building up  
12          there, you're always right next to somebody.  
13          So you always have to be considerate of what's  
14          downstream from you. So when you, when you  
15          design around that, you have to have fairly  
16          large buffer areas. And what we did was, like  
17          with Dr. John Crow, John was ... John was very  
18          good in designing something as a filter. He  
19          had a reputation of being able to filter  
20          contamination, runoff. And he used what he  
21          called a sock system. So what we did was we  
22          took huge net cloth bags and we would fill it  
23          with different types of organic material as a  
24          filter. So let's say, for instance, Lake  
25          Lynnwood. Lake Lynnwood we had to stay a



1 minimum of 200 feet away from the lake. And  
2 then, up to that 200 feet, we had to filter  
3 everything that was coming off the development  
4 that was going to end up eventually down into  
5 the lake. So you had a buffer area, in this  
6 case, was a 100 foot buffer. And then at the  
7 perimeter where it goes to borderline of the  
8 100 foot setback from the lake, we put in what  
9 he called a sock system. So we surrounded it  
10 like with a doughnut. We surrounded it. And  
11 then what you do is you put your vegetation  
12 over the top of that, so as the water is  
13 filtering down, if you get to a higher level,  
14 it would go through the sock and the sock would  
15 filter it out. The nice thing about that  
16 design was, if you had to go back and maintain  
17 it, it was fairly easy because you could pull  
18 the sock up. You would just roll it up and  
19 then you'd just put another one down. So it  
20 acted as a filter to keep the water out of the  
21 lake. And we finished that project, and I was  
22 back there about five years ago to take a look  
23 to see how everything was working. I had to be  
24 up North with my son, and I said, gee, I have  
25 to go up there and look at it. And it was

1 working perfectly. It was absolutely perfect.

2 Q: Okay. Now, on these projects, did you start  
3 before anything had been built and work up  
4 through the construction of the project?

5 A: In the Lake Lynnwood project, I started and  
6 finished it before anything else was there.  
7 And Mohawk View, part of it in the front end  
8 that wasn't part of the wetlands area, because  
9 it was sort of a crown project. You had the  
10 lake down here and you had the property up here  
11 and then there was a slope down this side and  
12 then the road. So they had started some  
13 excavating and they put in, I believe, five or  
14 six buildings, you know, on that site. So in  
15 that essence, the project was started.

16 Q: Okay. Now, then you essentially retired from  
17 that company in what, 1995?

18 A: I did.

19 Q: And that's when you came down to Surfside?

20 A: I did.

21 Q: Okay. I think you might have said '05 a while  
22 ago, but I might have misheard you. You came  
23 to Surfside in 1995?

24 A: I'm sorry, '95.

25 Q: Okay. And you thought, at that point, you had

1 left all that kind of stuff behind?

2 A: Yeah, pretty much.

3 Q: And so did you build a house at that point?

4 A: I did, yes, sir. I started the house in '96.

5 Q: And where is your house located?

6 A: It's on Lot 539.

7 Q: Okay. I want to show you a map that we've  
8 marked as Petitioner's Exhibit 10. And I'm  
9 going to give you a green pen, here ...

10 MS. SHAHID: Your Honor, may I approach the witness?

11 THE COURT: Yes, ma'am.

12 Q: Why don't you put an "FY" where your house is  
13 located, the best you can determine.

14 A: (Witness does as instructed.) I believe it's  
15 right here.

16 Q: Now, what borders your house, Mr. Yelinko?

17 A: The golf course.

18 Q: It's on the golf course?

19 A: Yeah.

20 Q: Okay.

21 A: It's right off of the green on fairway number  
22 five.

23 Q: Okay. Now, so do you play golf?

24 A: I do.

25 Q: Okay. So like most ... a lot of people who

1           come down to the beach, you planned to live on  
2           the golf course and play golf the rest of your  
3           life?

4           A:     Pretty much.

5           Q:     And so how long did that sort of retirement  
6           last for you?

7           A:     Well, I was at the golf course in 1998 and ...  
8           there's two golf courses at Deertrack, there's  
9           the North Course and the South Course. And the  
10          North Course was closed, and I didn't  
11          understand why. And they explained to me that  
12          they had holes 14, 15, and 16 under water and  
13          they'd been having a problem with it for a few  
14          years and they didn't understand why ...

15          MS. SHAHID: Your Honor, I object to the hearsay  
16          statements.

17          THE COURT: Sustained.

18          Q:     Mr. Yelinko, if you would, in answering your  
19          questions, don't tell us what somebody else  
20          told you.

21          A:     Oh.

22          Q:     Just tell us what you know from your own  
23          experience.

24          A:     They asked me if I could help them solve the  
25          problem. They knew what my background was from

1           several of the members over there. And I said  
2           yes, I would be willing to help them. And we  
3           worked out an arrangement, and I went to work  
4           on the problem.

5       Q:     Okay. And what was that problem?

6       A:     Holes 14, 15, and 16 went under water, in a lot  
7           of cases, with a half inch to three-quarter  
8           inch rainfall, severely underwater.

9       Q:     And which course was this?

10      A:     This was the North Course.

11      Q:     The North Course.

12      A:     Uh-huh (affirmative response).

13      Q:     So it's not the course that your house sits on?

14      A:     No.

15      Q:     Okay. And so what did you do in trying to help  
16           them solve that problem?

17      A:     Well, I investigated the drainage system  
18           because, apparently, that was the main channel  
19           that went out through Lakewood Campground. So  
20           I investigated that and found a collapsed pipe.  
21           Nobody wanted to take responsibility for  
22           repairing the pipe. The County said, well, we  
23           don't have an easement. The shopping center  
24           people were only renters that were there, and  
25           the owner was in New York. I found out who the

1 owner was and contacted them, explained the  
2 situation and they said, apparently, when you  
3 allowed the expansion of the shopping center,  
4 you moved the drainage system and you tried to  
5 connect the pipes, but somebody didn't connect  
6 one of the pipes. So every time .. it was  
7 blocked. Completely blocked. So every time we  
8 had a little bit of rain, it would back up and  
9 fill up the golf course and it took a period of  
10 days ... sometimes, they had the course closed  
11 for three, four days because of water. You  
12 couldn't even drive a cart through it. So I  
13 made an arrangement. They told me, well, we  
14 can't do anything. Why don't you speak to our  
15 attorney's? which I did. And I explained the  
16 situation to him and I said, look, either you  
17 have to repair the pipe because it affects all  
18 the drainage upstream, or you can give an  
19 easement to the County because it goes into the  
20 County system, and the County will come in and  
21 repair it. And he says, why should we give up  
22 an easement? And I said, well, I just  
23 explained to you, either you do it or the  
24 County will do it. He says, I got you. He  
25 says, send me the paperwork. And a few weeks

1 later he sent it back to the County. He sent  
2 it to a gentleman by the name of Steve Gosnell.  
3 The County accepted the easement. The County  
4 came in and repaired the pipe. Actually, they  
5 did more work than that because they expanded  
6 the channel. And from that point on, there was  
7 no more flooding.

8 Q: Okay. And did your work for the golf course  
9 end at that point?

10 A: It ended for a while. Uh-huh (affirmative  
11 response).

12 Q: And did you later do some additional work for  
13 the golf course?

14 A: I did. In 2002, we had a very unusual rainfall  
15 and the South Course went under water, and Mr.  
16 Gary Shaw contacted me and he said, would you  
17 be willing to work this out for me, take a look  
18 at it, see what you can come up with? And I  
19 did. And I actually ended up working for him  
20 for over three years because it was ... the  
21 South Course had a lot of severe drainage  
22 problems. Most of it was old corrugated pipe  
23 that rotted and collapsed and ... but the main  
24 problem was it's only one discharge area off  
25 the site. And that discharge area is so

1 critical to be kept open that any kind of  
2 blockage is going to back up and flood. And  
3 just to back up a minute. In '97 was my first  
4 experience with flooding in Phase IIB. And at  
5 that time, it was a blocked pipe. So when I  
6 went in 2002 to work for the golf course again,  
7 I knew exactly where to go and see if that was  
8 ... started downstream and made sure it was  
9 unblocked as well. There were blockages, and  
10 that was the main problem.

11 Q: Okay. Now, a couple of things you just  
12 mentioned I want to make clear on this map.  
13 When you talk about Phase IIB, can you show the  
14 Court what is Phase IIB.

15 A: Yes. This whole center area here (indicating).

16 THE COURT: Now, you're saying center area, and  
17 somebody looking at the record might not  
18 understand that. You're pointing to the area  
19 where there are lots platted; isn't that  
20 correct?

21 MR. YELINKO: Yes, sir, that's it.

22 THE COURT: You are not referring to the area that  
23 lies in between where the lots are platted,  
24 this center area, are you?

25 MR. YELINKO: You're referring to this area?



1 THE COURT: No, sir. To your ... below where you're  
2 speaking and to your ... that. You're not  
3 speaking of that area?

4 MR. YELINKO: Yes, sir. This is where the discharge  
5 goes off the property.

6 Q: But in terms of Phase IIB, it's just up here,  
7 these platted lots?

8 A: That's correct.

9 Q: Is that correct?

10 A: Yeah. What's inside the black line, up until  
11 this point right here (indicating).

12 Q: Okay. And the point you're indicating right  
13 here is over on the western side of this map  
14 where there are a ... the dark black lines  
15 nearly come together at the road. What is this  
16 main road running ...

17 A: That's Plantation ...

18 Q: It's Plantation Drive?

19 A: Plantation Drive.

20 Q: And so the lower part of Plantation Drive down  
21 at the bottom of this map, that's not in Phase  
22 IIB?

23 A: No, sir. That's a County ... that's a County  
24 road.

25 Q: Okay. So Phase IIB is this area that is ...

1 A: That's a private road.

2 Q: ... surrounded by ... is this the golf course  
3 where this blue color is?

4 A: Yes, sir.

5 Q: Okay.

6 **THE COURT:** I can understand you because I'm looking  
7 at you, but somebody reading the record is not  
8 going to understand that. Let me think a  
9 minute. Phase IIB, on the lots that lie to the  
10 ... and let me back up. The top of that  
11 drawing is not north. North ...

12 **MR. CHANDLER:** That's right.

13 **MR. YELINKO:** This would be west. This would be  
14 north (indicating).

15 **MR. CHANDLER:** I'll tell you what let's do. I've  
16 got an idea. Let me get something.

17 **THE COURT:** Are you looking for a marker, Mr.  
18 Chandler?

19 **MR. CHANDLER:** Yes, sir.

20 **THE COURT:** Here's a large green marker. Let's use  
21 this because there's no green already on that.

22 Q: Okay. Mr. Yelinko, why don't you take this  
23 green marker and let's just draw the perimeter  
24 of Phase IIB, if you come along this area here  
25 and outline what is Phase IIB in green.

1 A: Can I make a suggestion?

2 Q: Okay.

3 A: If we, if we do the roadway of Circle Drive and  
4 Plantation as to what's inside the 124 lots,  
5 everything bordering the green, those are the  
6 124 lots. Would that make it make sense?

7 MR. CHANDLER: Does that suit you, your Honor?

8 THE COURT: If it's a shorter line, if you just sort  
9 of draw it down the middle of the road and ...

10 MR. YELINKO: Well, I don't want to conflict with  
11 the other line that's going around here now.

12 THE COURT: Okay.

13 MR. YELINKO: Because that kind of mumbles it up a  
14 little bit.

15 THE COURT: All right. So Phase IIB then are the  
16 lots that abut the green line ...

17 MR. YELINKO: That's correct.

18 THE COURT: ... in the ... showing the road.

19 MR. YELINKO: Yes, sir.

20 Q: All right. The other thing that I wanted to  
21 ... you talked about there's one place that all  
22 of this area drains to. Can you show me where  
23 that is?

24 A: This one right here (indicating).

25 Q: Okay. And would you take this orange pen and

1 draw an arrow pointing to the place where the  
2 entire area drains.

3 A: There's one small area here on fairway number  
4 four that picks up these three ponds and  
5 discharges into this large canal. All the  
6 water goes into this one large canal. So this,  
7 this here, discharges over here (indicating).

8 Q: Okay. And so ...

9 A: Everything else comes over to here  
10 (indicating).

11 Q: All right. And even these that you've marked  
12 over on the left side of this map with these  
13 orange markings, they drain on this, what's  
14 called an existing ditch.

15 A: Uh-huh (affirmative response).

16 Q: Down to this intersection, down here?

17 A: Uh-huh (affirmative response).

18 Q: Okay.

19 A: This is a ...

20 **THE COURT:** All right. Let's define "down here,"  
21 Down here is the area below where he drew the  
22 first arrow, I think. And so it's in the, sort  
23 of in the middle of the golf course. All  
24 right. So now we have orange arrows showing  
25 drainage from the middle of the subdivision as

1 well as from the end and both sets of arrows  
2 arriving a common point; is that right?

3 MR. YELINKO: That's correct.

4 Q: Okay. Now, while we're looking at this, we've  
5 got some areas that have been colored in in  
6 blue on this.

7 A: We have.

8 Q: What do they represent?

9 A: Those are the ponds and channels through the  
10 whole nine holes of the golf course.

11 Q: As it exists right now?

12 A: Yes, sir.

13 Q: And are there any of these ponds that are not  
14 connected, ultimately, to this drainage down at  
15 the bottom?

16 A: No, sir. Everything is connected.

17 Q: All right. Now, you mentioned a flooding event  
18 in, I believe, 1998?

19 A: '97 ...

20 Q: '97?

21 A: ... was my first experience of flooding.

22 Q: Okay. And what was the circumstance then and  
23 what type of flooding?

24 A: There was a thunderstorm and in Phase IIB there  
25 are three locations where we have four by five,

1 four by four tubes in the ground and they chain  
2 off the road, because if they don't chain off  
3 the road, when the cars go through, it leaves  
4 a wake. So even if you only have an inch or  
5 inch and a half of rain, and the water is in  
6 the yards because of most of the homes in  
7 there, the way they were built, when you go  
8 through with your car, you create a wake and  
9 that water washes, rushes right into the  
10 houses. And that kind of triggered me a little  
11 bit and I said, what in the world is going on?  
12 I went to the board. At that time the  
13 president of the Board was a retired ...

14 **THE COURT:** Board over what?

15 A: The Homeowners' Board. And the board of  
16 directors referred me to Howard Durham, who is  
17 a retired engineer that lived in there, and  
18 Howard knew all about the drainage problems and  
19 he had been working for years with the County  
20 to try to solve the problems, and he wasn't  
21 really getting anywhere. So I spent a lot of  
22 time with him and he showed me the whole  
23 drainage system. And that was my first  
24 experience with investigating this whole  
25 drainage system.

1 Q: Okay. Now, in that flood in 1997, what got  
2 flooded?

3 A: In that case, there were only a few homes that  
4 actually had some water that came in through  
5 the front door or through the patio doors in  
6 the back. Most of the ... there were 22 homes  
7 in there that severely flooded. And most of  
8 those homes, it was in the garages. The  
9 garages were under water.

10 Q: Okay. And where are those homes generally  
11 located on this map?

12 A: If you have another colored pencil, I'll draw  
13 you a channel of where these homes are located.

14 Q: Okay. Let's see what else we've got. I might  
15 have another color. Okay. Draw a circle  
16 representing the areas that ...

17 A: The channel?

18 Q: Yeah.

19 A: Okay. (Witness does as instructed.) It's this  
20 ... this area right in here, right in the  
21 circle.

22 Q: Okay. And you've drawn sort of a ...

23 A: Circle.

24 Q: ... circle in pink.

25 A: Right.

1 Q: That's the area that floods?

2 A: This is the ... from my investigations, this is  
3 the main channel that always existed here  
4 before anything was developed, when it was all  
5 open land. All the drainage was through here  
6 down into Lake Elizabeth, Lake Dogwood and then  
7 down onto the ocean.

8 Q: Okay. Now, let's back up and talk a little bit  
9 about the board you went to. This is the board  
10 of the, what's known as the Deerfield  
11 Plantation Phase IIB Property Owners  
12 Association?

13 A: Yes, sir.

14 Q: And does that include all of the property  
15 owners that live in Phase IIB as we marked on  
16 this map?

17 A: Yes, the 124 properties.

18 Q: Okay. And how is that organization organized?

19 A: Well, you mean what's the consistency of the  
20 board? It's a ...

21 Q: I mean, do you have a board and officers and  
22 ...

23 A: Yes.

24 Q: Okay. And is it an incorporated organization?

25 A: It is.



1 Q: And you've seen the Articles of Incorporation?

2 A: I have.

3 Q: And you're a member?

4 A: Yes, sir, I am a member.

5 Q: Are you an officer or a director?

6 A: I am the president of the board at the present  
7 time.

8 Q: Now, when you bought your lot in this  
9 subdivision, did you get a deed that referred  
10 to a plat?

11 A: It did, yes, sir.

12 Q: And let me show a document that's been marked  
13 as Petitioner's Exhibit 9. And is this the  
14 plat that was referenced in the deed to your  
15 lot?

16 A: Yes, sir, it is.

17 Q: And this is the plat that was recorded in Horry  
18 County in Plat Book 67 at Page 56?

19 A: Uh-huh (affirmative response). Yes, sir.

20 Q: Okay.

21 MR. CHANDLER: Was that one already admitted?

22 MS. SHAHID: No objection.

23 MR. CHANDLER: I would ask that this plat be  
24 admitted.

25 MS. SHAHID: No objection.

1 MS. DIECK: No objection.

2 THE COURT: Mr. Barnett?

3 MR. BARNETT: No objections, your Honor.

4 THE COURT: And this is Petitioner's Exhibit 9?

5 MR. CHANDLER: Yes, sir.

6 THE COURT: Admitted without objection.

7 (Petitioner's Exhibit Number 9 was admitted into  
8 evidence.)

9 Q: Now, Mr. Yelinko, your lot ... what number is  
10 it numbered on here?

11 A: 539.

12 Q: Lot 539. And what does it border on?

13 A: On this plat, this shows holes number 10  
14 through 18. After the golf course was built,  
15 they reversed it and this became one through  
16 nine.

17 Q: Okay.

18 A: So on this one, I would be on hole number 12.

19 Q: All right. And what did that actually turn  
20 into? Which hole when they opened up the golf  
21 course?

22 A: Number five.

23 Q: Number five, okay.

24 THE COURT: And that is marked?

25 MR. CHANDLER: Yes, sir.

1 Q: Now, Mr. Yelinko, I want to hand you a series  
2 of photographs that have been marked starting  
3 with Petitioner's Exhibit Number 13, and Your  
4 Honor, those should be in your book. And we're  
5 going to try to walk kind of quickly through  
6 these so we don't take up too much time. Can  
7 you tell what's shown on Petitioner's Exhibit  
8 13?

9 A: The main, center portion of it shows Plantation  
10 Circle Drive on holes one through nine.

11 Q: Okay. So, basically, right there in the center  
12 of that photograph is Circle Drive and then ...

13 THE COURT: Excuse me a minute.

14 (Off the Record)

15 Q: So does this photograph basically show all of  
16 the golf course and Phase IIB of Deerfield  
17 Plantation?

18 A: Yes, sir.

19 Q: Okay. And over to the right where there's a  
20 circle with 17, what is that?

21 A: That's the entrance off of Business 17, Platt  
22 Boulevard.

23 Q: Okay. And that 17 stands for US Highway 17?

24 A: That's correct.

25 Q: And that's Business 17?

1 A: That's correct.

2 Q: All right, sir. Now, Petitioner's Exhibit  
3 Number 14, what does that show?

4 A: That is Dogwood Lake inside Surfside Beach.

5 Q: Okay. And referring back to Petitioner's  
6 Exhibit 13, where is this lake in relation to  
7 what we see on Number 13?

8 A: On the bottom right-hand corner of Exhibit 13,  
9 that black area is Lake Elizabeth.

10 Q: Okay.

11 A: Dogwood Lake would be to the right of that.

12 Q: All right. And ...

13 A: And south of that.

14 Q: Is there a connection between Lake Elizabeth  
15 and Lake Dogwood?

16 A: Yes, sir.

17 Q: Okay. And Lake Dogwood drains to where?

18 A: It drains to the Atlantic Ocean.

19 Q: And that's what we see over on the right-hand  
20 of Petitioner's Exhibit 14?

21 A: Yes, sir.

22 Q: Now, starting with 15, we'll go through these  
23 fairly quickly. What do we see on Exhibit 15?

24 A: This is a pond on fairway number one.

25 Q: Okay. And let's just orient a little bit here.

1 Fairway number one is ...

2 A: Right there (indicating).

3 Q: ... up here where we see an existing pond over

4 in the, sort of, northeast corner of the golf

5 course proper?

6 A: That's correct.

7 Q: All right. And where are we in Number 16?

8 A: Number 16 is the same pond, it's just that 15

9 is looking at it from this direction; 16 is

10 looking at it from that direction.

11 Q: All right. You were looking more or less

12 south. Now we're looking back to the north?

13 A: North. Uh-huh (affirmative response).

14 Q: All right, sir. And what's the next

15 photograph?

16 **MS. SHAHID:** Your Honor, would it be possible for Mr.

17 Chandler to shift his position a little so we

18 can ... we're having to share these

19 photographs, so we can't come up there to watch

20 the board?

21 **THE COURT:** Is that better?

22 **MS. SHAHID:** That's much better. Thank you.

23 **THE COURT:** Mr. Chandler, would you like for me to

24 get an easel?

25 **MS. SHAHID:** We've got one right here.

1 MR. CHANDLER: I'll tell you what, we've got one  
2 right here we can ... put this up.

3 Q: Okay. We're on Number 17.

4 A: Seventeen. Uh-huh (affirmative response).

5 Q: Tell us where that is?

6 A: Yes, sir. That's right here in this location  
7 looking across these two ponds (indicating).

8 Q: All right. Now, in the background, those  
9 buildings.

10 A: Yes, sir.

11 Q: Are they in this area up here, sort of to the  
12 northwest of ...

13 A: They are.

14 Q: ... that pond?

15 A: Those are the buildings.

16 Q: Okay. Now, what do we have in 18?

17 A: Eighteen, we're looking across the connection  
18 between these two ponds. There's some  
19 underground PVC pipes that drain this pond into  
20 this pond.

21 Q: Okay. And where are we at Number 19?

22 A: Number 19, we are at this corner of this pond,  
23 which would be, one, two, three, the third pond  
24 up.

25 Q: And the ...

1 THE COURT: You know, let's stop a minute. Here  
2 again, let's take just a regular pen and mark  
3 the exhibit number on the ponds as they're  
4 shown. Otherwise, somebody looking at this is  
5 not going to understand what in the world  
6 they're talking about.

7 Q: Okay. Let's start back at the first one that's  
8 not an aerial.

9 A: This is 15.

10 Q: All right.

11 A: That's shown on tee box number one.

12 Q: And put 15 and a circle.

13 A: Right.

14 Q: Right there.

15 A: And then 16 is over here.

16 Q: Looking this way?

17 A: Looking that way. And then 17 is right here  
18 looking across into these two ponds. And then  
19 18, we're over here looking across that  
20 connection. And then 19, we're looking at this  
21 corner right here.

22 Q: So are we taking that from ...

23 A: We are ...

24 Q: ... we're up here?

25 A: We're right there.

1 Q: And that's 19?

2 A: That's 19.

3 Q: And in the background, is that house part of  
4 Phase IIB?

5 A: It is.

6 Q: Now, what are we looking at on Number 20?

7 A: Number 20, we're looking at the hand and feet  
8 of Jake Duncan.

9 Q: Okay.

10 A: And the feet and pants legs of Jeff Thompson  
11 from DHEC.

12 Q: All right. And when was that photograph made?

13 A: I believe we did this in October.

14 Q: Okay. It was when we all walked out on the  
15 site together?

16 A: Yes, sir.

17 THE COURT: Of 2008?

18 A: 2008.

19 Q: And we were taking, Mr. Duncan was taking soil  
20 samples at that time?

21 A: He was.

22 Q: Okay. And you can't tell from that where that  
23 particular hole is dug?

24 A: Yes, sir, I can. It's ... it was right here,  
25 right where that number six is (indicating).



1 Q: Okay. So that's Number 20?

2 A: Twenty. Uh-huh (affirmative response).

3 Q: Okay. Now, where are we at 21?

4 A: Okay. On 21, we're at this pond right here and  
5 we're right about in this area looking straight  
6 across the pond in that direction.

7 Q: Twenty-one, going this way.

8 A: That's correct.

9 Q: And what have we got in 22?

10 A: Twenty-two we have a photograph with several  
11 people on it that we made the site visit with  
12 on ... in October and we are standing right ...  
13 where is second? We're right in the middle  
14 here. Twenty-two is right in the center.

15 Q: All right. What's 23?

16 A: Twenty-three is this area right here  
17 (indicating).

18 Q: Okay. And we're looking over here at ...

19 A: That's correct.

20 Q: ... condominiums on the other side of ...

21 A: Right to the buildings.

22 Q: And 24, are you in the same spot?

23 A: Twenty-four is yeah, near the same spot.

24 Q: Okay. Close enough ...

25 A: It was behind 22. We were behind right ... we

1 stepped back ...

2 Q: Okay. About in this area?

3 A: Yeah, we were looking in that direction.

4 Q: Okay.

5 A: And then 25 is this area right here. We're  
6 looking right across this pond, We're right  
7 ... we're right here, 25, and we're looking to  
8 your left.

9 Q: Okay.

10 A: And 26 is ... we were just past this area on  
11 the cart path if you were looking into this  
12 area right here (indicating).

13 Q: Number 26 we're looking back ...

14 A: Looking back.

15 Q: ... across the pond?

16 A: That's correct. And 27, we were just ... just  
17 up a little bit further to the left looking in  
18 the same direction. And 28 is ... it's all the  
19 way up there where the third tee is, and we're  
20 looking right ... right at third tee and we're  
21 looking right across at this corner  
22 (indicating).

23 Q: Okay. So we're standing ...

24 A: Twenty-eight.

25 Q: ... about right here?

1 A: Uh-huh (affirmative response).

2 Q: That's 28?

3 A: Right. Twenty-nine, we're standing over here  
4 and we're looking across this way (indicating).  
5 That's it. And in 30, we were are right in  
6 here, looking towards the house, 30. And in  
7 31, we're back over this area right here  
8 looking across.

9 Q: Right in here?

10 A: Yeah.

11 Q: Thirty-one.

12 A: Thirty-one.

13 Q: And we're looking ...

14 A: We're looking that way (indicating).

15 Q: Okay.

16 A: And 32, we're just over to the right of 31, go  
17 to your left of 31.

18 Q: Over to this side?

19 A: Right over there. We're right there and we're  
20 looking to the same, it's the same house.  
21 We're looking to the same direction.

22 Q: Okay.

23 A: And then 33, we're to the left of 32 and we're  
24 looking in this direction (indicating). And in  
25 34, we're right here looking down this canal.

1 And then 35 is ... we're over here and we're  
2 looking in that direction (indicating).

3 Q: Okay. Thirty-five and we looking this way?

4 A: We're looking towards the buildings, that way.  
5 And then 36, this picture is showing Mr.  
6 Duncan, he's in between here, so we're looking  
7 that way (indicating)..

8 Q: Okay. Where are we on the golf course at this  
9 point? Up to about hole number four?

10 A: We're in the vicinity of the number three  
11 green.

12 Q: Okay.

13 A: And this is a picture showing Mr. Duncan and  
14 Mr. Thompson right here (indicating). Thirty-  
15 seven.

16 Q: And which way is that pointing at?

17 A: We're looking back this way.

18 Q: Back this way?

19 A: Yeah. And 38 is ... well, in 38, we're right  
20 here, looking that way (indicating).

21 Q: Looking toward the south.

22 A: Yeah. And 39 is basically the same thing,  
23 we're just to the right of 38 and we're looking  
24 the same there. In 40, what we're looking at  
25 is this area right here. We're looking up

1           towards this direction, so we would be probably  
2           right in here (indicating). That would be 40  
3           looking that way. And 41 is basically the same  
4           picture.

5       Q:     Okay.

6       **THE COURT:** Did I have a lapse in attention or did  
7           we leave out 39?

8       **MR. CHANDLER:** We've got 39 on here, Your Honor. It  
9           was, basically, almost in the same position as  
10          38.

11      A:     Yeah, 39 and 40 are right in the same location.  
12               Where are we at? We're at 41.

13      Q:     We're up to 42.

14      A:     Forty-two. In 42, we're over in this area  
15           right here (indicating). We're at this area  
16           over this way, 42, right there and we're  
17           looking this way. We might have been a little  
18           bit more ... 43 would be up in this location  
19           here, this way (indicating).

20      **THE COURT:** Does 43 show a pond or the confluence of  
21           two ditches?

22      **MR. YELINKO:** It's the confluence of two canals  
23           coming together here, Your Honor. It's ...

24      **THE COURT:** You ought to be able to identify that.

25      Q:     Where are those two ditches on here? In fact,

1 are we sure ...

2 A: All right. This is not showing the ditches,  
3 but there's a ditch here. That's this ditch.  
4 That's these houses back here. See this? See  
5 this connection here? It's not ... it's not in  
6 blue, this connection. And then 44 is Jake  
7 again and we're right in here and we're looking  
8 backwards. We're looking ...

9 Q: Forty-four.

10 A: We're here and looking back ...

11 Q: We're looking out this way?

12 A: That's correct. And 45, we shift across the  
13 road to here and what we're looking at is we're  
14 looking at holes five and six. So we're  
15 looking, we're looking this way at this canal.

16 Q: Forty-five?

17 A: Yeah.

18 Q: Looking this way?

19 A: Yeah. And 46, we're at the same spot over  
20 here, and we're looking this way. Forty-seven,  
21 we're showing this connection right here  
22 (indicating).

23 Q: Where was that taken from? About in here?

24 A: Yeah, the housing is over here and we're  
25 looking in this direction here (indicating).

1 And then 48 is this main canal coming down  
2 right here. This is 48. We're up here ...

3 Q: Right here?

4 A: Yeah. We walked up the cart pathway. And then  
5 49 is this canal looking this way. Fifty is  
6 this pond right here ...

7 Q: Okay.

8 A: ... and we're looking, we're on the cart path,  
9 we're looking in this direction (indicating).

10 Q: Right here?

11 A: Uh-huh (affirmative response). And then 51,  
12 we're over here looking this way (indicating).

13 Q: Just at ... right at about where 49 was?

14 A: Yeah. And 52 is this pipe connection right  
15 here.

16 Q: Okay. Where was that taken from?

17 A: We were standing here looking across, looking  
18 to the left. Fifty-three is this connection  
19 here, we're over ... we're standing here  
20 looking this way at this connection. Fifty-  
21 four, fairway eight and we're looking right  
22 here (indicating). We're standing on the cart  
23 ... where's the cart ... here's the cart path,  
24 and we're looking this way.

25 Q: We're right here?

1 A: Yeah.

2 Q: Okay. And we're looking up this way?

3 A: Right. Toward ... and 55 is the outlet box

4 right here.

5 Q: All right. So we're standing right about here,

6 about the tip of this orange arrow ...

7 A: Standing right there and we're looking at that

8 discharge area. Fifty-six is this area up in

9 here (indicating). And we're standing looking

10 back toward the houses in 56.

11 Q: Right. That's that ...

12 A: Fifty-seven ... this picture is out of place.

13 This picture is these condos up here. This is

14 going ... we're up here. This is fairway

15 number 2. We're up here looking this way.

16 We're here, looking this way at these

17 buildings.

18 Q: We've got them a little out of order. We're up

19 here ...

20 A: Yeah, this one's out ...

21 Q: ... out on this, like that?

22 A: Yeah, that's 57.

23 Q: And we're looking back.

24 A: And we're looking that way. And 58 is right

25 here (indicating).



1 Q: All right. Is that your backyard?

2 A: It is.

3 Q: All right. So 58 is going to be right up here  
4 in your backyard looking this way?

5 A: Looking out to the ... well, yeah, right.  
6 We're looking in that direction, back over  
7 there. And this is 59 looking the opposite  
8 way.

9 Q: All right. It's kind of hard to write them  
10 both in here, so I'm going to put it right  
11 below this, that way, but 59 is actually going  
12 to be on the north side of this dark line or  
13 the west side ...

14 A: Yeah, well ... maybe right below it you can put  
15 60, because we're ... we just...

16 Q: Okay. Because 60 is the same thing?

17 A: Sixty is the same thing.

18 Q: All right. Let me stop you just a minute. Go  
19 back to Number 58, if you would, please. It's  
20 the first one of your lot.

21 A: Uh-huh (affirmative response).

22 Q: Okay. Where is ... if you went by the plat  
23 that you got your deed from, where on that map  
24 is your ... I mean on that photograph is your  
25 property line?

1 A: My property line is approximately ten feet back  
2 from this edge right here (indicating).

3 THE COURT: When you say the edge, are you speaking  
4 of what I perceive as a bulkhead ...

5 MR. YELINKO: The back of the shrubs ... the back of  
6 the ... yeah, a bulkhead. There's a bulkhead  
7 behind the shrubs.

8 THE COURT: And your line is ten feet beyond the  
9 bulkhead?

10 MR. YELINKO: That's correct.

11 THE COURT: To the right of the photograph?

12 MR. YELINKO: Well, in this photograph, it would be  
13 to the left, I guess.

14 THE COURT: Your line is to the left?

15 MR. YELINKO: Yeah, it runs in here (indicating).

16 THE COURT: So your house is to the right?

17 MR. YELINKO: My house is to the left.

18 THE COURT: To the left of the photograph in Exhibit  
19 58?

20 MR. YELINKO: Uh-huh (affirmative response).

21 THE COURT: Thank you.

22 Q: Okay. So this part of this grassed area  
23 between your house and the bulkhead, that is  
24 outside your strict property line?

25 A: Yeah, it's an encroachment onto the golf

1 course.

2 Q: Okay. And did you grade it that way?

3 A: I did.

4 Q: Okay. Let's go on through some of these

5 others.

6 A: Okay. Sixty-one ...

7 Q: Sixty-one?

8 A: ... is right here looking in that direction.

9 Q: We're looking out ...

10 A: Yeah, we're out a little bit further. There

11 you go, 61.

12 Q: And we're looking out sort of onto the golf

13 course?

14 A: That's correct.

15 MS. SHAHID: Mr. Chandler, did you do 60? I'm

16 sorry. I stopped at 59.

17 MR. YELINKO: Yeah, 60 ...

18 MS. DIECK OR SHAHID: Can I just make sure I know

19 what 60 is?

20 A: That's it.

21 Q: All right. Now, which one are we on?

22 A: Sixty-one.

23 Q: Sixty-one is just basically looking out ...

24 A: Right. Just looking out on that green.

25 Q: Okay. Now, there's some water on there. What

1 is that?

2 A: That's standing water that's there six to seven  
3 months out of the year.

4 Q: Okay. How does your lot drain on the back?

5 A: It drains two different directions. It drains  
6 out towards a drainage basin in the front of my  
7 house between the two lots, lot 58 and 59. And  
8 it also drains a portion of it to the golf  
9 course.

10 Q: Okay. And on this plat that's been marked as  
11 Petitioner's Exhibit 10, just down to the south  
12 of your lot we see a swale or a ditch running  
13 along here.

14 A: Uh-huh (affirmative response).

15 Q: Does that continue on up, sort of the swale,  
16 behind your lot?

17 **THE COURT:** Excuse me. You said to the south of his  
18 lot and you were moving your hand in a  
19 southerly direction, but if his lot is one of  
20 those that I see pictured, it would actually be  
21 to the east of his lot, wouldn't it?

22 **MR. CHANDLER:** It would be. You're right.

23 Q: Well, I was talking about this ditch that's  
24 shown here, it's sort of to the south, but  
25 they're off to the east of these lots. Does

1           that swale generally pick up the drainage from  
2           these lots?  
3       A:     It does.  
4       Q:     Okay.  
5       A:     And also from the golf course.  
6       Q:     All right. Continue on.  
7       A:     Sixty-two is a larger picture of this wet area.  
8       Q:     All right.  
9       A:     That's right there behind ... it encompasses  
10           these three lots, my lot and then a lot on each  
11           side of me.  
12       Q:     All right. Which one have we got next? Sixty-  
13           three?  
14       A:     Sixty-three is a shot across the street from  
15           the front of my house looking that way.  
16       Q:     All right. Standing out here by the road ...  
17       A:     Yeah.  
18       Q:     ... at your house, and we're looking ...  
19       A:     That way (indicating).  
20       Q:     That's back across?  
21       A:     Uh-huh (affirmative response).  
22       Q:     And what do we see behind those houses?  
23       A:     That's fairway number two.  
24       Q:     Okay. And then some condominiums way behind  
25           those in the background?

- 1 A: Yes, sir.
- 2 Q: All right. What have we got next? Sixty-four.
- 3 A: Sixty-four is, this is this discharge right in
- 4 here. This is looking back towards fairway
- 5 number nine in here, so we're looking, we're
- 6 looking back this way here. We're looking in
- 7 this direction this way (indicating).
- 8 Q: Okay. And about where you're at. Can you
- 9 point that out.
- 10 A: I'd say right about in here (indicating).
- 11 Q: Sixty-four?
- 12 A: Uh-huh (affirmative response).
- 13 Q: And looking in this direction?
- 14 A: Correct.
- 15 Q: Okay. Now, do you know whose lot that is?
- 16 A: I'm trying to think of his name. I can picture
- 17 him, but I can't think of his name. He's an
- 18 architect.
- 19 Q: Okay.
- 20 A: In Myrtle Beach. I can't think of his name
- 21 right now.
- 22 Q: All right. And do you know where the property
- 23 line is for that person's lot?
- 24 A: Oh, I know his name, Jim Hubbard.
- 25 Q: Okay. And do you know where his property line

1 is on this picture?

2 A: His property line is ... do you see where this  
3 bush is, this fern here? It's right between  
4 this drainage canal and the back of this tree.  
5 Somewhere in this area. It's between this big  
6 tree and this fern (indicating).

7 Q: All right. And what have we got next?

8 A: This?

9 Q: This is number 65?

10 A: This is number 65 and this is, we're looking  
11 this way (indicating).

12 Q: All right. And about where are we standing  
13 taking this?

14 A: We're about right here (indicating).

15 Q: Sixty-five?

16 A: Right. And we're looking that way. We're  
17 looking down, and this is the drainage canal  
18 that comes across there.

19 Q: Okay.

20 A: And this one, we're looking back ... we're on  
21 the opposite side of fairway number eight and  
22 we're looking this way (indicating).

23 Q: Okay. So we're somewhere in this area ...

24 A: We're somewhere in here.

25 Q: .... and number 66?

- 1 A: We're between here and the cart path, and we  
2 shot up.
- 3 Q: I'm looking at this as 66.
- 4 A: Okay. And 67 is this area right in here  
5 (indicating).
- 6 Q: All right.
- 7 A: This is this area right in here. This is ...  
8 this is it. This used to be a pond in here,  
9 and ...
- 10 Q: All right. Are we over here on this side?
- 11 A: Right. No, we're over here looking back.
- 12 Q: All right. Okay. That big flat area there,  
13 you were just talking about it. What is that?
- 14 A: It was an old pond.
- 15 Q: Okay. And when was it a pond?
- 16 A: I'd say ...
- 17 **MS. SHAHID:** Your Honor, I'm not sure he can lay ...  
18 has laid a foundation to provide that  
19 testimony. I'm concerned when he says "I'd  
20 say" unless it's within the period that he is  
21 personally familiar.
- 22 A: Yeah, I worked there when we filled the pond  
23 in.
- 24 **MS. SHAHID:** Okay.
- 25 A: It was around 2002 that we filled that pond in.



1 Q: Okay.

2 A: It wasn't ... this pond wasn't done in one  
3 maneuver. We did this over a period of years  
4 on this pond. The first thing we did was we  
5 brought the embankments in. The problem that  
6 the golf course had ... this is a very,  
7 probably the toughest hole on the golf course.  
8 The pond went right up to the green. And we  
9 had a lot of seniors that played there, and  
10 everyone of them, their ball went in the  
11 pond, so all we got was complaints. So what we  
12 tried to do was bring the pond in, and  
13 eventually, we just filled the whole thing in.

14 Q: Okay.

15 A: And this is shot of this pond area up and down  
16 this way. This is 68.

17 Q: Sixty-eight, here?

18 A: Right there (indicating).

19 Q: We're on this side?

20 A: Right, looking that way. And this drainage  
21 canal is looking right in here. We're  
22 actually ...

23 Q: This is Number 69?

24 A: Yeah. We're actually on the corner of this  
25 looking right here. We're looking down into

1           this drainage canal (indicating).       Sixty-nine.

2       Q:     Sixty-nine.

3       A:     And we're looking, we're up this way.   That's  
4           it.

5       **THE COURT:** Mr. Chandler, that finishes the series of  
6           photographs on the golf course ...

7       **MR. CHANDLER:** Yes.

8       **THE COURT:** ... and the clock says 10:30.   It's  
9           actually 11:30, I believe, isn't it?

10      **MR. CHANDLER:** Yes, sir.

11      **THE COURT:** Let's take about a ten or 15- minute  
12           break, and just be at ease, now, and let's come  
13           back in about 15 minutes.

14      **MR. CHANDLER:** Thank you, Your Honor.

15                               **(Off the Record)**

16      **MS. SHAHID:** Judge McLeod, Judge Kitrell evidently  
17           summoned Elizabeth, also.     So she wasn't  
18           expecting to be summoned, but ...

19      **THE COURT:** We'll have to wait then.   Check into  
20           that and see if you can find out how long it'll  
21           be.   If she's going to be a while, we'll just  
22           go ahead and break for lunch.   Otherwise, I was  
23           going to go at least another 45 minutes.

24                               **(Off the Record)**

25      **THE COURT:** Ladies and Gentlemen, I think it will be

1 more time efficient if we recess now for lunch  
2 and come back at 1:30. Does that suit  
3 everybody?

4 **MS. SHAHID:** Yes, sir.

5 **MR. CHANDLER:** Yes, sir.

6 **THE COURT:** For you folks who are not familiar with  
7 Columbia, there is a Wendy's within walking  
8 distance on South Assembly. There's also a  
9 sandwich shop right across the street, which  
10 Wich, or something, it's not bad. See you at  
11 1:30.

12 (Lunch break from 11:30 a.m. until 1:30 p.m.)

13 **THE COURT:** All right. It's 1:30. Mr. Chandler,  
14 are you through with the exhibits that you  
15 needed to mark the location of on your exhibit,  
16 what is it, Number 9? Is that map Number 9?

17 **MR. CHANDLER:** Yes, sir, I believe we are.

18 **THE COURT:** All right. Let the record reflect that  
19 prior to the recess, Mr. Chandler went through  
20 Exhibits 15 through 69 and presented them to  
21 the witness who indicated the location on  
22 Exhibit Number 9 where these photographs were  
23 taken -- excuse me, Number 10; my law clerk  
24 says Exhibit Number 10 -- and has marked, Mr.  
25 Chandler, under the direction of the witness,

1 marked the location and number of each, and I  
2 was watching and it appeared that he marked  
3 them in the correct place. Thank you. Mr.  
4 Chandler, proceed.

5 **MR. CHANDLER:** Thank you, Your Honor.

6 **Q:** Now, Mr. Yelinko, I've got just a couple of  
7 more photographs that I want to run through a  
8 little bit. Now, Petitioner's Exhibit 70 is  
9 very similar to one that you've already looked  
10 at before. Is that an overall shot of this,  
11 including the subdivision you live in and the  
12 golf course?

13 **A:** Yes, sir.

14 **Q:** Okay. And Petitioner's Exhibit 71, what is  
15 that?

16 **A:** This is a portion of the front nine of the golf  
17 course and our homeowner's association.

18 **Q:** And does it show the outlet where all of these  
19 ponds drain?

20 **A:** Yes, sir, it does.

21 **Q:** And where is it shown on this photograph?

22 **A:** It's shown right here (indicating).

23 **Q:** Okay.

24 **A:** I don't know how you would describe it, but  
25 it's a black line, which is the drainage canal.

1 Q: And that's about in the middle horizontally but  
2 a little bit to the ... or vertically, but to  
3 the right of the photograph?

4 A: That's correct.

5 Q: That black line is ... what is actually there;  
6 what are we seeing where that black line is?

7 A: That's the main discharge channel that comes  
8 off of the front nine of the golf course. It  
9 also shows along this hedge line here the main  
10 drainage canal, which is anywhere from 30 to  
11 50 feet wide, and it comes down into this  
12 little receiving pond. From that point, it  
13 goes out, on this photograph, it goes out  
14 through a drainage canal under Route 17.

15 Q: And that pond that you're talking about is to  
16 the right of the photograph? It's sort of  
17 shown as a dark area just to the left of what  
18 appears to be a white roof of a building?

19 A: That's correct.

20 Q: Okay. Now, from ... let's skip over to Number  
21 73. Does it also show that little pond we were  
22 just talking about and that white-roofed  
23 building?

24 A: Yes, sir.

25 Q: And it's over on the upper left portion of this

1 photograph?

2 A: That's correct. Top left-hand corner.

3 Q: All right. And from there, is there ... does  
4 it show the watercourse running from that  
5 point?

6 A: It does.

7 Q: And where is it running?

8 A: It runs under Highway 17 and it runs between  
9 the old miniature golf and the existing batting  
10 cage into Lake Elizabeth.

11 Q: And that's Lake Elizabeth that is at the lower  
12 right of the photograph?

13 A: Yes, sir, right here (indicating).

14 Q: Okay. And then with Number 72, how does  
15 photograph Number 72 relate to what we just  
16 saw?

17 A: Well, if you took 72 and you held it together  
18 with 73, that's the connection.

19 Q: Okay. And so ...

20 A: And that's Dogwood Lake and then you can see  
21 the channel that runs out into the Atlantic  
22 Ocean.

23 THE COURT: Would it be correct to say that 72 is to  
24 the east of 73?

25 MR. YELINKO: Correct. That is correct, yes, sir.

1 THE COURT: Toward the ocean?

2 MR. YELINKO: That's correct, sir.

3 THE COURT: Thank you.

4 Q: All right. And then finally Number 74 shows  
5 all of these areas on one photograph, doesn't  
6 it?

7 A: That's correct. There's the complete  
8 connection from the development through the  
9 golf course into Surfside Beach. Lake  
10 Elizabeth, Dogwood Lake and the Atlantic Ocean.

11 Q: Thank you, sir. Now, I want to take your  
12 attention back to the ponds actually on the  
13 golf course.

14 A: Okay.

15 Q: Have you had opportunities to make any close  
16 observations with these golf course ponds?

17 A: Yes, sir.

18 Q: Okay. And have you noticed any aquatic life in  
19 these ponds?

20 A: Yes, I have.

21 Q: And what have you seen in the ponds?

22 A: We have a multitude of a fish called bream.  
23 It's a, a lot of people refer to it as a  
24 sunfish. It's a fairly flat fish that runs  
25 anywhere between six to eight inches in

1 diameter. And also quite a large salamander  
2 population.

3 Q: Okay. Now, back on the photograph that was  
4 marked as Petitioner's Exhibit 19. Take a look  
5 at that. And what do we see in that  
6 photograph?

7 A: A lot of turtles.

8 Q: A lot of turtles?

9 A: (Nods head affirmatively.)

10 Q: Do you generally see turtles in these ponds?

11 A: Yes, sir.

12 Q: In more than one of the ponds?

13 A: All of the ponds.

14 Q: Do you observe any other wildlife in or around  
15 these ponds?

16 A: We have quite a habitat of blue herons and  
17 egrets. We have three families of white owls  
18 that live on the golf course and their main  
19 habitat is adjacent to the ponds where there  
20 are wooded areas.

21 Q: And do these owls use these ponds for any  
22 purpose?

23 A: That's their main food source.

24 Q: Okay. They actually feed in the ponds?

25 A: Yes, sir.



1 Q: Okay. You've observed this yourself?

2 A: Yes, sir.

3 Q: And on Exhibit 24, what do we see in that  
4 photograph?

5 A: It's a whole series of ducks, Canadian Geese,  
6 as they're referred to.

7 Q: Okay. Do you see other waterfowl in these  
8 ponds on occasion?

9 A: Mallards. A lot of mallards. And we also  
10 have, there are white swans that traverse  
11 through both the South and North Golf Course  
12 and also Wicked Stick Golf Course, which  
13 adjoins this golf course.

14 Q: Does anybody ever fish in these ponds?

15 A: Yes, sir, all the time.

16 Q: Okay. Have you ever fished in these ponds?

17 A: I have.

18 Q: And do you catch anything?

19 A: I do, within a matter of seconds.

20 Q: And have you observed other people catching  
21 fish in these ponds?

22 A: By the buckets full.

23 Q: And what do they do with those fish?

24 A: Well, everyone that I've questioned, they tell  
25 me they're just good eating. So I guess it's

1 a food source for various people to come and  
2 fish out of the ponds. We never prevented  
3 anybody from coming onto the golf course, even  
4 when I worked there, as long as they were off  
5 the fairways.

6 Q: Now, we've talked about, a little bit about  
7 some flooding out at this area. Since you've  
8 lived there, about how many times have you seen  
9 what you would consider flooding occur in this  
10 area?

11 A: I observed four major floods and probably eight  
12 minor floods.

13 Q: Okay. And what would you call a major flood?

14 A: Where the water was running through the houses  
15 through the front door and out the back door.

16 Q: Okay. And what ... how do you describe a minor  
17 flood?

18 A: A minor flood, in most cases, were where it  
19 just affected peoples' garages, but also, the  
20 roads had to be closed off because if people  
21 drove through the road, it created enough wake  
22 that it would take the water from the garages  
23 into the homes. So we actually had ... and  
24 that's in a minor situation. Major flood, the  
25 water's already in the homes.

1 Q: And when was the last time you observed any of  
2 these events?

3 A: 2001, 2002.

4 Q: And there hasn't been any since then?

5 A: No, we've been very fortunate since then that  
6 we haven't had any major rainfall.

7 Q: Okay. Now, in ... you had talked earlier about  
8 the work you did tracing the drainage and any  
9 drainage problems out there.

10 A: Uh-huh (affirmative response).

11 Q: Tell me what you found, if anything, that was  
12 the problem.

13 A: The main problem is the sole main discharge off  
14 the site. There's only one discharge off the  
15 site. The County, we had several meetings  
16 regarding this with the County. The County  
17 said they could help somewhat, and then laid  
18 out to us what our responsibilities were. And  
19 what eventually happened was they replaced a 36  
20 and a 48-inch pipe that ran under Lower  
21 Plantation Drive in this area here  
22 (indicating). And they replaced it with a four  
23 by five box. One of the problems that they  
24 encountered, and when we had a preliminary site  
25 meeting about changing this and I explained to

1 County engineering department, you're not going  
2 to ... they wanted to put a 72-inch pipe in.  
3 And I explained to them, I said, you're not  
4 going to be able to put a 72-inch pipe in there  
5 because you're going to run into the utilities.  
6 And they sort of didn't believe me. How I knew  
7 that was in my investigation and research, I  
8 went to Grand Strand Water and Sewer and I  
9 searched their records as to their utilities,  
10 and I also went to Santee Cooper because they  
11 have a main transmission line running up  
12 Plantation Drive, and I found that they were  
13 both too shallow for them to put this 72-inch  
14 pipe. So what they did was, and we have a  
15 photograph here, they put in a four by five  
16 box, which they were able to stay above the  
17 sewer main by approximately two feet.

18 **THE COURT:** When you say box, you mean a box  
19 culvert?

20 **MR. YELINKO:** A box culvert, yes, sir.

21 **Q:** Okay. Now, so is that a constriction on the  
22 drainage?

23 **A:** It is in respect that when they ... they had  
24 much difficulty there. Originally what they  
25 did was they ripped out the telephone and the

1 cable lines because they never took that into  
2 consideration. They came very close to the  
3 water main. When they tried to get the box  
4 underneath the utilities, they had a problem  
5 keeping everything level, plus it was very wet  
6 and the box culvert started to sink on them.  
7 And to this day, it still has a right-hand lean  
8 to the box when you're looking downstream  
9 because they could never ... the material  
10 underneath wasn't strong enough to support it.  
11 What should have happened, instead of doing a  
12 pre-cast culvert, it should have been a culvert  
13 built in place, therefore, they could have  
14 eliminated all this, but they decided they  
15 would do a box culvert. It's a problem. So  
16 right now what we have is it's sunk  
17 approximately eight to ten inches. So you no  
18 longer have the size opening because it's  
19 restricted because it's full of silt and they  
20 can't clean it out.

21 Q: Okay. Now, that's down in this area right down  
22 at the bottom where we've got these last orange  
23 arrows on Exhibit 10?

24 A: That's correct.

25 Q: Okay. Now, this existing ditch that comes

1 along the left, lower left side of this Exhibit  
2 10 that has these orange arrows by it, does it  
3 drain any area besides Deerfield?

4 A: Oh, yes, it ... if you go to the southwest and  
5 along Glenns Bay Road, it picks up at the golf  
6 we call Caropines, which is very large, very  
7 spread out. It also runs all the way up to  
8 Bypass 17 and picks up South Bay Lakes. It  
9 also picks up a section in the back of ... I  
10 can point these out if you have an overall map,  
11 but it picks up a section of what's known as  
12 Jensen's Trailer Park. And it also picks up  
13 everything on Tupelo Bay.

14 MR. BARNETT: Your Honor, objection. I don't think  
15 he's laid a foundation. He's proceeding to say  
16 that he's concluded what the entire drainage  
17 area is, and I don't believe he's laid any  
18 foundation that would be adequate for that.

19 Q: Mr. Yelinko, have you investigated where there  
20 are connections to this drainage ditch that we  
21 were just talking about? Have you been out and  
22 looked at connections to this ditch?

23 A: Yes, sir, I've physically looked. I've  
24 physically walked the whole area with all the  
25 drainage canals and connections.

1 Q: Okay. And all these areas that you've just  
2 described, you've seen all of those connections  
3 with your own eyes?

4 A: I have.

5 Q: All right, sir. And go on with what you were  
6 saying.

7 **THE COURT:** Are you satisfied, Mr. Barnett?

8 **MR. BARNETT:** Well, Your Honor, I think he can  
9 testify actually that he's seen these  
10 connections, but calculation of the drainage  
11 areas is a somewhat more professional  
12 calculation that I don't think he's qualified  
13 to give. But certainly he can testify that  
14 he's seen the connections. That's all he's  
15 said so far.

16 **THE COURT:** I'm going to overrule your objection. I  
17 understand what he's talking about and I don't  
18 take it in the strictest technical sense.

19 **MR. BARNETT:** Yes, sir.

20 A: I believe what the question was, was that  
21 canal, where does that canal pick up. I wasn't  
22 trying to make a determination as to the  
23 volume. I was determining where it comes from.

24 Q: Yes, sir.

25 A: Where it starts and where it ends. And it all

1 ends at the same place where we end. It all  
2 comes to one location.

3 Q: Okay. And again, you mentioned Caropines; you  
4 mentioned Jensen's Trailer Park.

5 A: Tupelo Bay.

6 Q: Tupelo Bay and ...

7 A: And South Bay Lakes.

8 Q: South Bay Lakes. Now, on the other side, on  
9 the sort of west and to the north ...

10 A: Uh-huh (affirmative response).

11 Q: ... of Deerfield, does any water come down and  
12 connect here as well?

13 A: Yes, sir. And that water all comes through  
14 Phase IIB POA.

15 Q: Okay. And can you describe for me where you  
16 have traced pipes and other flows that come in  
17 from that area?

18 A: I have. It picks up all of Plantation Resort  
19 property. That's this property in here  
20 (indicating). All this water comes this way.  
21 So it picks up hole 18 and hole 17. It also  
22 picks up hole number ten and all the condos and  
23 everything in here, all the way back to the  
24 driving range which sits behind the clubhouse.  
25 Then I found through my investigation a 2002



1 stormwater report by Hobbs and Upchurch which  
2 included an additional 135 acres up on the  
3 north side that all comes down through this  
4 area. And in that report, they didn't make any  
5 conclusions as to where to go with that water  
6 because they had nowhere to go with it. The  
7 other two drainage areas in the report, they  
8 put gutters ...

9 **MS. SHAHID:** Your Honor, I need to object to him  
10 quoting from a report.

11 **THE COURT:** Sustained.

12 **Q:** Let's don't talk about what another report  
13 says. I think you've answered my question  
14 adequately. Now, as a result of your  
15 discussions with the County about drainage  
16 problems and flooding problems, did the County  
17 take any action after the floods in the late  
18 '90s?

19 **A:** Not to my knowledge, other than replacing that  
20 culvert, the box culvert.

21 **Q:** Were any studies made?

22 **A:** There were.

23 **Q:** And were they made by the County?

24 **A:** The County contracted out to a company by the  
25 name of LPA Engineering out of Columbia.

1 Q: And what was that study designed to do?

2 A: That study was designed to come up with a  
3 criteria and a solution to handle the flooding  
4 in Phase IIB and the discharge that comes  
5 through Phase IIB.

6 Q: Okay. And were there recommendations made?

7 A: There were.

8 Q: And what did those recommendations entail?

9 A: One of the things that we worked on was trying  
10 to find how to lower the discharge in back of  
11 Circle Drive before it hit this elevation. Can  
12 I give an example?

13 Q: Sure.

14 A: This elevation here is between 15 and 15-5. On  
15 the back of these lots over here, it's anywhere  
16 between 19 and 20. What LPA concluded was that  
17 there should be approximately a 90 acre-foot  
18 detention area created on the golf course,  
19 therefore, it would lower this area on fairway  
20 six, seven, and eight allowing the water when  
21 it comes off of Circle Drive and all of Phase  
22 IIB to drop down and then slow discharge. So  
23 that what the conclusion was, they're all  
24 competing to get out of the same outlet. So  
25 when this water is coming down from the upper

1 area from the west area here, it's competing  
2 with our water. The problem is their water is  
3 getting, because of the volume and the head  
4 pressure, their water is getting down to this  
5 pond down here before our water has a chance to  
6 get down here, because we're trying to take all  
7 this water down here and bring it down through  
8 a narrower channel. This is a much larger  
9 channel so the value's greater. So the  
10 conclusion, and I worked with this engineer by  
11 the name of Scott Rodavich (ph) on this report,  
12 and we went and we tried to calculate where  
13 could we store or detain this water to  
14 eliminate or to cut back the competition of it  
15 all getting out that one location.

16 Q: And the conclusion was you needed at least 90  
17 acre-feet of additional storage?

18 A: That was just for the golf course. That's  
19 correct.

20 Q: What's an acre-foot?

21 A: An acre-foot is ... in square feet, it would be  
22 66 by 666 by one foot deep.

23 Q: Okay. So it's basically an acre on ... if you  
24 did it in one single pond, you'd have 90 acres  
25 one foot deep?

1 A: Well, that's one way to do it.

2 Q: Okay.

3 THE COURT: Ninety acres?

4 MR. YELINKO: Ninety acre-feet is, you would ... the  
5 equivalent would be greater than the 90 acre-  
6 feet.

7 Q: Well, one acre-foot would be an area of one  
8 acre, one foot deep?

9 A: That's correct.

10 Q: Okay. And so you can get either 90 acres ...

11 A: If you ...

12 Q: ... one foot deep, 30 acres three feet deep?

13 A: That's correct. But it normally doesn't work  
14 that way. You can go deeper than a foot.

15 Q: Okay. Now, if this is the bottleneck here, why  
16 doesn't the County just come in and deal with  
17 the utilities and move them out of the way and  
18 just channel all of this stuff to build a big  
19 channel to get this stuff downstream faster?

20 MS. SHAHID: Your Honor, I object. I don't think  
21 that he could speak for why the County would or  
22 would not do something.

23 THE COURT: What do you say, Mr. Chandler?

24 MR. CHANDLER: Well, he has talked about the studies  
25 that he's done and all of the work he has done

1 in investigating this, and I think he's got  
2 substantial knowledge of this area and what's  
3 been going on and why. I think he's ... we've  
4 laid the foundation for him to answer that  
5 question.

6 **MS. SHAHID:** I think ... Your Honor, first of all, I  
7 would dispute that he's done studies. This is  
8 a lay witness who's a property owner who is  
9 familiar with the area and has made  
10 observations, but he certainly hasn't done  
11 studies. He has involved himself in the County  
12 process of reviewing this because he has a  
13 vested interest in it, but I don't think he's  
14 qualified to speak for the County as to why the  
15 County did or did not do something.

16 **THE COURT:** I'm going to agree with you on that.  
17 Sustain the objection.

18 **MR. CHANDLER:** Okay. We'll get back to that.

19 **Q:** Now, this LPA report that came out recommending  
20 90 acre-feet of storage, did it recommend any  
21 other storage in this overall watershed?

22 **A:** Yes, sir.

23 **Q:** And it recommended a series of several other  
24 storage or detention areas within the  
25 watershed, didn't it?

1 A: It did.

2 Q: Have any of those been built?

3 A: The County ... not to the lake. The County

4 installed an additional pond in this one

5 photograph you have we show the receiving pond.

6 The County put in a secondary pond. There's

7 one photograph ... here it is. If we look at

8 73, this is the ... that was the existing

9 receiving pond. This was a vacant lot in here.

10 The County purchased this lot and put a

11 secondary pond in there with a discharge drop

12 box with three ... with three millimeter

13 screen, and the County invited me and our

14 District Five stormwater representative, Mr.

15 Mayer, to come to a meeting with our County

16 representative; County engineer, Steve Gosnell;

17 and the stormwater manager, Tom Garigen. So we

18 had a meeting and we discussed what they were

19 going to do here. What they did not tell us at

20 the time was that they were going to enclose

21 this drop box inside the pond with a three

22 millimeter screen. And the reason they did

23 that was to keep the trash from flowing

24 downstream into Surfside Beach, because

25 Surfside Beach, at the time, pretty much had a

1 standing complaint against Deertrack with DHEC  
2 because when the state camp comes in and closes  
3 down the beach, the town always felt like the  
4 contamination was coming from upstream. So we  
5 had, you know, several meetings regarding this  
6 discharge area, but the conclusion ... this  
7 area up in here (indicating) was concluded it's  
8 about between 16 and 17 acres, that this should  
9 be acquired and a detention area put in here  
10 with a secondary outlet to this detention area,  
11 and then to find another outlet besides this  
12 one to take that water off so they could split  
13 up this discharge area.

14 Q: But that was never done?

15 A: It never happened.

16 Q: Okay. And this extra detention area that you  
17 mentioned ...

18 A: Right here (indicating)

19 Q: ... over here, how large is this?

20 A: It's about, it's under an acre.

21 Q: Okay. And it's on the east side of Plantation  
22 Drive?

23 A: East side of Plantation and to the west side of  
24 Bypass 17, so it's ...

25 Q: Or Business 17?

1 A: Business 17.

2 Q: Now, the screen that was put in at that  
3 location, can you tell me what you mean by  
4 that.

5 A: It's a trash screen. It's designed to filter  
6 out any trash from going downstream. The  
7 problem with the three-millimeter screen is  
8 it's so fine it's like it's as fine as a window  
9 screen that you would have on your house and  
10 it'll filter out anything as small as a pine  
11 needle. And they experienced a severe problem  
12 there. We had a three and a quarter inch rain  
13 and the pressure built up that it inverted the  
14 screens inside the chamber. So they had to  
15 dismantle the top and they had to pull the  
16 screens out.

17 Q: You say inverted screen. Tell me what you ...

18 A: The screens were on on the face of the chamber  
19 and the pressure built up. The water pressure  
20 was so high it was up over the top and it was  
21 going into the parking lot. It took the  
22 screens and pushed them inside the chamber.  
23 These are stainless steel screens.

24 Q: So basically, the screens were clogged up with  
25 debris?



1 A: Yes.

2 Q: And leaves?

3 A: Yes.

4 Q: So that water wasn't passing through there  
5 anymore?

6 A: Yeah.

7 Q: Are those screens still there?

8 A: Yes. They reconstructed ... they built them  
9 out about a foot so there would be an overflow  
10 over the top of the screens and they put it on  
11 a 33 degree angle. And what they explained to  
12 me when they were going to redo this, this is  
13 Mr. Garigen, was that their theory was that as  
14 the water level rose, the trash would rise with  
15 it and it would push it up. And I explained to  
16 him, I said the only problem that I see is you  
17 did not take into consideration the algae  
18 growth, because the algae starts growing on  
19 that screen and when we get into warm weather,  
20 it just grows right up the screen.

21 Q: And what does that do?

22 A: It just clogs it 100 percent. It's 100 percent  
23 blocked.

24 Q: Okay. Which cuts down on the passage of water  
25 through that area?

- 1 A: Cuts down 80 percent or better.
- 2 Q: Okay. Now, as you began waiting on finding
- 3 these additional areas to build some more
- 4 storage capacity to solve the flooding
- 5 problems, did you say the discussions were to
- 6 try to build that storage on the golf course?
- 7 A: The 90 acre-feet?
- 8 Q: Yes, sir.
- 9 A: Yeah.
- 10 Q: And at that time, were you working for the golf
- 11 course in any capacity?
- 12 A: Not at that time.
- 13 Q: Okay. And did there come a time that you were
- 14 working with a golf course architect to
- 15 redesign the golf course?
- 16 A: Yes.
- 17 Q: Okay. And when was that?
- 18 A: That was early 2005.
- 19 Q: And who were you working with?
- 20 A: It was a gentleman by the name of Porter
- 21 Gibson. He was one of the original architects
- 22 that laid out the golf course.
- 23 Q: And you met with Mr. Gibson?
- 24 A: I met with Mr. Gibson and Mr. John Shadd.
- 25 Q: Who is John Shadd?

1 A: He was the owner of the property.

2 Q: And what were they planning to do?

3 A: They were closing the golf course down. They  
4 told us that they sold the North Course and  
5 they were going to remodel and redesign the  
6 South Course, and once they came up with a  
7 plan, they were going to meet with us and  
8 explain exactly what they were going to do.  
9 And I said to them, there's one major  
10 consideration that we would like to request,  
11 and I said in the original 2000 report, we were  
12 trying to lower this area, this 90 acre-foot  
13 area so that we don't flood. They were very  
14 well aware of the flooding problem. And I  
15 asked Mr. Gibson, I said, can we work together  
16 as a homeowners' association and the golf  
17 course owner in helping redesign this so that  
18 we can get a better discharge coming out. And  
19 he said that he would look at it. And about  
20 three weeks later he was on-site, and he always  
21 came to my back door of my house, and he said,  
22 I've figured this out. He said, we can do it,  
23 but I cannot do it in one contiguous area. He  
24 said, we're going to have to separate it out.  
25 And I said, that's not a problem. So what he

1           was going to do was he was going to work it out  
2           sort of as islands and then the detention would  
3           be around these islands, therefore, he could  
4           lower that area and still keep his T boxes up,  
5           his greens up, his fairways up.   What they  
6           talked about doing was trimming the golf  
7           course, instead of a full-fledged normal 6800  
8           yard course, they were talking about doing a  
9           scaled-down version, what they referred to as  
10          an executive golf course.

11       Q:    Okay.   Now, the Mr. Shadd that you mentioned  
12           meeting with, who is he?

13       A:    Mr. John Shadd, he was the owner of the golf  
14           course.

15       Q:    And did he have any role in the development of  
16           Phase IIB?

17       A:    Yes, sir, he developed it.

18       Q:    And did he develop other property in that area?

19       A:    Yes, sir.   He developed all of it.

20       Q:    Okay.   And is Mr. Shadd still alive?

21       A:    No, I've heard he passed away.

22       Q:    And is it your understanding that his family  
23           members own Deertrack Golf, Incorporated now?

24       A:    That's my understanding.

25       Q:    Now, instead of the executive golf course and

1 the redesign, what did you hear was going to  
2 happen to the property?

3 A: That's what we were told originally, that they  
4 were going to redesign it. They had to provide  
5 an area for a clubhouse, maintenance yard and  
6 parking. So they were, at that time, that's  
7 what they were working on.

8 Q: And whatever became of those plans?

9 A: Well, a period of a few months went by and  
10 nothing happened. Then I got a knock on the  
11 door one day from the president of our  
12 homeowners' association and he said, did you  
13 hear what happened to the golf course? And I  
14 said the only thing I know is they're working  
15 on coming up with a redesign and they're going  
16 to meet with the board and all the property  
17 owners. He said, no; he said, that's not what  
18 happened. He said, they sold it. And that's  
19 how I got involved. The homeowners' board, I  
20 was not on the board at that time. They asked  
21 me to get involved, and, what do we do? You  
22 know, you worked in this business, what do we  
23 do? And I said, well, I think what we need to  
24 do is find out exactly what's going on in the  
25 permitting process. We have to start there.

1           If it's sold already, we need to investigate.  
2           And that's how it started.

3       Q:    Okay.     And why did the people with the  
4           homeowners' association come to you and ask you  
5           to get involved?

6       A:    When Mr. Durham was alive, he was on the ... he  
7           was the president of the board, board of  
8           directors for the POA, and they knew that Mr.  
9           Durham and I worked with the County, we had  
10          many meetings, we tried to resolve many of our  
11          drainage problems at that time. We also had  
12          meetings with the golf course management  
13          company. It was a ... the management company's  
14          name was PLC Golf. And they were cooperative  
15          to a certain degree. Actually, nobody wants  
16          to, you know, put money out of their pocket for  
17          something that they can't really, you know,  
18          derive an economic benefit immediately for it,  
19          and that's how you run golf courses. You know,  
20          golf course operators are there to make money.  
21          But what we did agree on was that our  
22          association would pay for all the material to  
23          replace some of these defunct and dilapidated  
24          drainage pipes and they would do the work.

25       Q:    Okay.     And so due to your experience in that,

1           they wanted you to get involved with this sale  
2           of the golf course and what was going on?

3       A:     Yeah.

4       Q:     Okay. And I take it you agree to get involved,  
5           and what did you do?

6       A:     First thing I did was I went out to the County  
7           engineer to set up a meeting with Steve Gosnell  
8           and went out and verified the application.

9       Q:     Who is Steve Gosnell?

10      A:     He's the head engineer for Horry County.

11      Q:     All right, sir.

12      A:     I met Mr. Gosnell through Mr. Howard Durham  
13           many years before, and so he knew me. And we  
14           discussed this and he knew what our problem was  
15           with flooding, and he explained to me the  
16           permitting process and how it worked. He said  
17           the first thing, he said, I would recommend you  
18           do is find out where they are in their Army  
19           Corps permit. He says they need to get that  
20           approved, he says, before we even move forward.  
21           So I did that and found out that the Corps was  
22           already in the process of issuing their  
23           determination. So I had many conversations  
24           with them regarding this, and I said to them,  
25           you know, our only concern is the flooding, you

1 know, how do we ... how do we handle the  
2 flooding. And I was told that that's not their  
3 issue; that's a state issue. They said if you  
4 have flooding you come under state  
5 jurisdiction, not federal.

6 Q: And so where did you turn next?

7 A: The next thing that I did was I contacted Bill  
8 Kregloe at the Myrtle Beach office of DHEC, and  
9 he said, why don't you come over? He says, I  
10 have time available if ... I forget what day it  
11 was, he said, why don't you come over and we'll  
12 sit down and discuss it and take a look at a  
13 map. So I did. I went over to his office and  
14 met with him and we discussed the whole thing.  
15 And I said our ... again, the whole concern  
16 that we had in this whole project is the  
17 flooding. How do we prevent our homes from  
18 going underwater? And the County was nice  
19 enough to give me a set of the engineering  
20 plans in the beginning. So I was in the  
21 process of reviewing the plans. And one of the  
22 problems that I uncovered immediately was the  
23 elevation grades. The elevation grades were  
24 much higher than what our grades were. The  
25 other problem was it was represented



1 County that they would divert all their water  
2 around us; that no water would continue to flow  
3 through our association. And in their original  
4 submittal, they showed that. The problem was  
5 they never calculated the additional drainage  
6 that comes onto the site that was in the Hobbs  
7 Upchurch report. So when that was all  
8 calculated ...

9 **MS. SHAHID:** Your Honor, I object. I don't think  
10 he's qualified to talk about what was or was  
11 not calculated by a professional engineer in a  
12 drainage report, or to quote from the other  
13 report that we previously objected him  
14 referencing.

15 **THE COURT:** Let me hear him answer the question  
16 again and I'll rule on that. What were you  
17 saying, Mr. Yelinko?

18 **MR. YELINKO:** What I was trying to point out is in  
19 reviewing the plans and going over it with the  
20 County, I was trying to bring the County up to  
21 date to make sure that they didn't have any  
22 other conclusion about our flooding. So we had  
23 another ... I had another meeting with Mr.  
24 Gosnell, and I said, Mr. Gosnell, if you look  
25 at this plan and look at our flooding, you have

1 to admit that there's something wrong with  
2 these grades. And he looked at them with me  
3 and he says, yeah, he says, you're right; there  
4 is something wrong with these grades.

5 **THE COURT:** Well, just stop a second. I certainly  
6 sustain the objection as to anything Mr.  
7 Gosnell said.

8 **MS. SHAHID:** Well, but he's giving you a little  
9 different version or some background from the  
10 testimony that I objected to. The testimony  
11 that I objected to had him forming conclusions  
12 based on the ETS report.

13 **THE COURT:** Well, he's certainly not been qualified  
14 as an expert and he cannot opine, so I sustain  
15 that objection.

16 **Q:** Let's just talk in general terms about what you  
17 found. When you say you were given plans, what  
18 plans were given?

19 **A:** The engineering plans that were originally  
20 submitted to the County.

21 **Q:** Okay. And they were submitted on behalf of  
22 Bill Clark Homes?

23 **A:** Yes.

24 **Q:** And Bill Clark Homes was the company that was  
25 purchasing the property?

1 A: That's correct.

2 Q: And, to your knowledge, has Bill Clark Homes  
3 ever closed the deal?

4 A: Not to my knowledge.

5 Q: Okay. So it's still a contract, but not ...  
6 there hadn't been a deed or change in title, to  
7 your knowledge?

8 A: It started out as a purchase under contract.

9 Q: Okay. And after you pointed it out what you  
10 saw as problems to the County, did you talk to  
11 any other agencies?

12 A: Yes.

13 Q: And what agencies did you talk to?

14 A: DHEC and Army Corps of Engineers.

15 Q: Okay. And who did you ... well, you already  
16 talked to Bill Kregloe.

17 A: That's correct.

18 Q: Did you eventually receive a public notice  
19 about an application at DHEC?

20 A: About a month or so later, several weeks later,  
21 Bill Kregloe called me and he said, Frank, he  
22 said, this is out of my jurisdiction. I've  
23 been ordered to send everything down to  
24 Charleston. And I said, well, I said, I don't  
25 understand. He said, I don't understand it

1           either, and so all I can tell you is, I have to  
2           send it to Charleston ...

3   **MS. SHAHID:** Your Honor, I'm going to object.

4   **THE COURT:** Sustained.

5   **MS. DIECK:** That's hearsay.

6   **Q:** Okay. Let's don't talk about what he said.

7           Did you get public notice?

8   **A:** Yeah.

9   **Q:** Okay. And what did public notice indicate?

10   **A:** That we had a certain period of time to apply  
11       for the public hearing.

12   **Q:** Okay. And what did your organization do?

13   **A:** I contacted the Charleston office of DHEC to  
14       find out procedure. I spoke to a Tara Maddock  
15       and she explained to me the procedure ...

16   **MS. DIECK:** Your Honor, again, if he could just  
17       testify to what the conversation was what he  
18       heard ... well, not what he heard, but not to  
19       what she said.

20   **THE COURT:** I sustain that.

21   **Q:** Okay. Let me ask you it this way. Were you  
22       told what the process was for getting a public  
23       hearing?

24   **A:** Not until I made an inquiry.

25   **Q:** Okay. You made an inquiry to find out what you

1           needed to do to comment and have a public  
2           hearing?

3       A:     That's correct.

4       Q:     And did the neighborhood submit comments?

5       A:     We did.

6       Q:     Okay.   And among the comments that have been  
7           marked as Petitioner's Exhibit Number 7, a  
8           whole group of comments, was there a comment  
9           letter from you personally?

10      A:     Yes.

11      Q:     Okay.   And have you seen the comment letters  
12           that were sent in by your neighbors?

13      A:     Yes.

14      Q:     Okay.   And they sent in quite a number of  
15           comments, didn't they?

16      A:     I believe there were between, almost 30.

17      Q:     Okay.   And they sent in photographs of flood  
18           events that happened on the property; isn't  
19           that correct?

20      A:     Yes, sir.

21      Q:     And was a public hearing held?

22      A:     It was.

23      Q:     And did you attend?

24      A:     I did.

25      Q:     How many other people attended that public

1 hearing?

2 A: There were people out in the parking lot. I'd  
3 say at least 150.

4 Q: Okay. And how many people spoke at that public  
5 hearing?

6 A: The only people that could speak were the  
7 people that signed in to speak.

8 Q: And about how many was that?

9 A: I'd say less than 12.

10 Q: Okay. And what concerns were expressed to the  
11 Agency?

12 A: The flooding.

13 Q: Were there any other issues that were presented  
14 to the Agency?

15 A: We ... the discussion took a few different  
16 directions because of the people that were  
17 speaking. For instance, the Mayor of Surfside.  
18 There were some engineers that got up and  
19 spoke, and I got up and spoke. My ...  
20 basically what I was doing was I was ... DHEC  
21 had supplied me with a copy of the regulations,  
22 and they told me read the regulations. And  
23 that's where we started. And at this hearing,  
24 I questioned the fact that in there I read that  
25 there was a section that DHEC had to address

1           where it said, is there a potential for  
2           flooding or is there flooding in the area, and  
3           when I asked that question, the answer came  
4           from Shannon Hicks, and she said, Mr. Yelinko,  
5           you're absolutely right and we will address  
6           that issue.

7       Q:    Okay.   Were any issues raised about the ponds  
8           and the channels?

9       A:    I don't ... I do not believe so.

10      Q:    Now, what was the proposal that was being made  
11           by Bill Clark Homes?

12      A:    At that time it was 301 single family homes on  
13           6000 square foot lots.

14      Q:    Okay.   301 homes and they were to be built in  
15           this area where the golf course has been?

16      A:    That's correct, completely surrounding Phase  
17           IIB 180 degrees.

18      Q:    Okay.   And were there going to be roads built  
19           through there?

20      A:    Yes, sir.

21      Q:    Okay.   And how many acres of disturbed land was  
22           that going to involve?

23      A:    Can I ... in order to answer that, I need to  
24           back up a minute if I can do that.

25      Q:    Sure.

- 1 A: One of the things that I did under the Freedom  
2 of Information Act is request of DHEC to go  
3 down to Charleston and review all the files.  
4 In reviewing the files, the permits that they  
5 were granting was for disturbing 53 and a half  
6 acres, and when I compared that to what the  
7 presentation was to Horry County, and Horry  
8 County it was 100 percent of the site to  
9 include 87 acres. So that was a question that  
10 I brought up that was never answered by DHEC.
- 11 Q: Okay. But basically at the County, the entire  
12 87 acres would be disturbed?
- 13 A: It's actually 84 point some acres plus there  
14 were three acres plus offsite that had to be  
15 disturbed.
- 16 Q: Okay. Now, as a result of receiving this  
17 notice and gaining the knowledge that you had,  
18 or during this process, did you ever have any  
19 meetings with anybody from Bill Clark Homes?
- 20 A: We did.
- 21 Q: Okay. And tell me about the first meeting that  
22 you had with anybody from Bill Clark Homes.
- 23 A: After my initial meeting with the County, Bill  
24 Clark Homes decided to have a meeting at their  
25 clubhouse at a development next to us called



1       Surfside Beach Club, and the County sent us a  
2       letter, and we also received a letter from Mr.  
3       Jeff Farrell from Bill Clark Homes that he  
4       wanted to have all the homeowners present so  
5       they could discuss with us exactly what his  
6       intentions were.     At that meeting, it was  
7       addressed again, both by Mr. Farrell and Mr.  
8       Tom Garigen from the County, that no water  
9       would come through Phase IIB. And we accepted  
10      that until a later date and there were ...  
11      there were a total of 17 revisions that were  
12      submitted to the County on this plan. After we  
13      got past about the sixth or seventh revision,  
14      then all of the sudden it became clear that the  
15      plans have changed and they are now typing back  
16      into our drainage system.

17   Q:    Okay.

18   A:    So I went to the County to verify this, and I  
19       was told yes, they are going to tie back in,  
20       but you have to remember water was running  
21       through there to begin with. And I said, well,  
22       what our homeowners were told and what they're  
23       believing is that they're going to help relieve  
24       our flooding by diverting the water around us.  
25       I said, how do I go back now and tell the

1 homeowners, well, folks, now we're going to  
2 have to take water back through our association  
3 again. And they said ... the County's answer  
4 to me was, well, you know, it's your fault.  
5 You found the additional drainage that's come  
6 through there. They have to do something with  
7 the drainage. I said, well, that's not the  
8 understanding or the agreement that we had.  
9 So, you know, we'd got pretty much at that time  
10 down to the point where we had no choice but to  
11 file an appeal.

12 Q: Okay. But I want to still talk about before  
13 you got to that appeal for a couple of minutes.  
14 Now, when you looked at the plans that had been  
15 submitted, what did those plans indicate were  
16 going to happen to these ponds and channels on  
17 this property?

18 A: With the exception of one pond, they were going  
19 to all be reconfigured and additional ponds  
20 added.

21 Q: Okay. Were any of them going to be filled in?

22 A: Yes, sir, quite a few of them.

23 Q: Okay. And what was going to happen in the  
24 areas where they were going to be filled in?

25 A: Either homes were going to be built or roads

1           were going to be built.

2       Q:     And was there any discussion of wetlands?

3       A:     Discussions with who?     With the permitting  
4           agency?

5       Q:     Did you raise any issues related to wetlands?

6       A:     I did.

7       Q:     Okay.   And who did you raise those issues to?

8       A:     Both Army Corps or Engineers and DHEC and OCRM.

9       Q:     Now, when you met with Mr. Farrell of Bill  
10           Clark Homes, did the neighborhood talk to him  
11           about the flooding problems?

12      A:     They did.

13      Q:     And what were they told by the company?

14      A:     That they were going to take that into  
15           consideration.

16      Q:     Okay.   And did you have any subsequent meetings  
17           with anybody related to this project, either  
18           the current owner or Bill Clark Homes?

19      A:     Yes, we did.

20      Q:     Okay.   Who else did you meet with?

21      A:     Between November and December of 2007, we tried  
22           to contact the Shaad family directly and they  
23           would never respond.   So I found out that their  
24           in-house counsel was a gentleman by the name of  
25           Jason Murphy, so I sent Mr. Murphy a certified

1 letter explaining our problem. It was more of  
2 an appeal to Mr. Murphy saying, look, you're  
3 still the property owner. The golf course  
4 right now has been closed for two years. It  
5 isn't being maintained. We're very concerned  
6 because our flooding issues haven't been  
7 addressed. And I was appealing to him to  
8 please contact me so we could have a  
9 discussion.

10 Q: Okay. Did he get back in touch with you?

11 A: Yes, sir, he did.

12 Q: And did you end up meeting with him?

13 A: We did.

14 Q: Where?

15 A: He flew out from Knoxville, Tennessee, in  
16 February and we met with Richard Smith from the  
17 McNair Law Firm at their office on ... it was  
18 in Myrtle Beach at the Founders Center.

19 Q: And did you go out to the property?

20 A: We did.

21 Q: And where did you go on the property?

22 A: We pretty much covered the whole South Golf  
23 Course.

24 Q: Okay.

25 A: We spent most of our time on the front nine.

1 Q: All right. And what concerns did you express  
2 during that meeting?

3 A: The concerns about the flooding.

4 Q: Okay. And you looked at all the ponds and the  
5 other water courses out there?

6 A: We did.

7 Q: Okay. And what did Mr. Murphy say about those  
8 water courses?

9 A: Well, when I explained to him how the water  
10 transfers through the property, he questioned  
11 me.

12 Q: And what did he want to know?

13 A: Well, he said, look, he said, I don't think I  
14 have in all my years, he said, I don't think  
15 I've been on this site more than three times.  
16 He said, so I'm really not that familiar with  
17 it. He said, but what I'm trying to get an  
18 understanding of here is you're saying John  
19 Shaad built all this. I said, that's correct.  
20 And he said, he dug all these drainage canals  
21 and he put in this drainage system. I said,  
22 that's correct. He says, but it runs through  
23 your property, your association's property. I  
24 said, that's our problem; that's why we're  
25 concerned about the flooding. He said, well,

1 he said, from what you're telling me, he  
2 I believe you might have certain rights to  
3 these canals. He says, I tell you what I'm  
4 going to do, he says, I'm going to set up a  
5 meeting with Bill Clark Homes, and he said,  
6 would you have a problem attending the meeting  
7 so we could discuss all this. And I said,  
8 absolutely not. And a few ... a week or two  
9 weeks went by, I don't remember the exact time,  
10 but he did set up a meeting. He called me on  
11 the phone, and I said, well, I think the best  
12 bet would be to meet at one of our board ... we  
13 meet on a Wednesday night, the third Wednesday  
14 of the month, and he said that will be fine.  
15 He said, I'll set up the meeting. He said,  
16 what time do you want us to be there. I said,  
17 how about around 8:00. He said, fine, we'll be  
18 there. Well, the only one that showed up at  
19 the meeting was Mr. Farrell, and sorry to say,  
20 Mr. Farrell came into the room and he said,  
21 folks, first let me say I don't know what I'm  
22 doing here. And I pointed out to Mr. Farrell,  
23 I said, Mr. Farrell, Mr. Murphy was the one  
24 that set up this meeting. I said, and I'm  
25 surprised that Mr. Murphy isn't here. So he

1        said ... I told him again and the rest of the  
2        board members told him the same thing, we're  
3        concerned about our flooding, and the way it  
4        looks now, you haven't improved our situation  
5        Truthfully, it looks like you've compounded it.  
6        So he sat down and he started to explain to us  
7        as to what his rights and his responsibilities  
8        were and how he goes about getting approvals on  
9        the property, and he said, you know, you've  
10       flooded before, you're going to flood again.  
11       So one of the members said, well, we thought  
12       this meeting was so we could sit down and  
13       negotiate something so that we could try to  
14       protect ourselves from flooding. He said, I  
15       have nothing to negotiate. He said, I went  
16       from 301 homes down to 278 homes. He he said,  
17       I'm not taking one more lot off. He said, I  
18       have ... he says, I have all the rights here,  
19       he says, as the applicant. He says, all I need  
20       is to meet the zoning ordinance, he says, and  
21       build my job, complete it, sign it off, and get  
22       out. Now, there were approximately, I'd say,  
23       between ten and 12 members at that meeting.

24    Q:    Okay.

25    A:    So from that point, we had no choice but to

1        hire an attorney and hire an engineer to show  
2        what was happening here, to get confirmation,  
3        and we also hired an environmentalist.

4        Q:    Okay.    Now, the first step, did you file an  
5        appeal on your own with the association without  
6        an attorney?

7        A:    We filed ... we had 30 days.    I received a  
8        letter from Ms. Maddock and Ms. Maddock in her  
9        letter to me stated that if you don't like our  
10       decision, you have 30 days to file with the  
11       board out in Columbia, which is what we did.

12       Q:    Okay.    And did the board give you a hearing?

13       A:    They did not.    They denied us a hearing.

14       Q:    Okay.    And then did you hire an attorney?

15       A:    Yes, sir.

16       Q:    Okay.    And that was how this appeal came to  
17       this court?

18       A:    That's correct.

19       **THE COURT:**    Excuse me a minute, Mr. Chandler.    Does  
20       anybody need a short break?    Everybody okay?  
21       Go ahead.

22       Q:    Mr. Yelinko, going back to what we started off  
23       with this testimony back in the beginning.    How  
24       many years did you work in the land development  
25       business?



1 A: Forty plus.

2 Q: Okay. And how many projects were you involved  
3 in where you went from a contract to purchase  
4 raw land through a complete development of that  
5 property?

6 A: Had to be at least 25.

7 Q: And have you ever in your career undertaken any  
8 due diligence reviews when either you had  
9 property under contract or somebody you worked  
10 for had property under contract?

11 A: Yes, sir. That was a standard clause in all  
12 our purchase contracts.

13 Q: Okay. And what do you see as required under  
14 due diligence?

15 **MS. SHAHID:** Your Honor, I object. I don't think  
16 this witness is qualified to testify what is  
17 required under due diligence. I object first  
18 of all on relevance. I don't know what his  
19 experience with contracts 30 years ago has  
20 anything to do with why we're here today.  
21 Secondly, due diligence is a legal term. It's  
22 a legal obligation and duty upon parties to  
23 contract, so I don't believe he's qualified to  
24 provide that testimony.

25 **THE COURT:** I'm going to overrule your objection. I

1 think he's had enough experience at least at  
2 the basic level to tell me what that means.

3 Q: Just to be clear, it's been less than 30 years  
4 since you've did this kind of work, isn't it?

5 A: Yes, sir.

6 Q: Okay. What kind of things would you include in  
7 a due diligence review?

8 A: I guess the simplest answer would be the last  
9 two or three jobs that I was hired by the  
10 Kushner Company to do. What I always had done  
11 was have a checklist. Now, in most cases, we  
12 had anywhere from 90 to 120 days to conclude  
13 due diligence and make a decision to go with  
14 the contract or get our money back or back out  
15 of the contract. And with the Kushner  
16 Companies we had a checklist of what we needed  
17 to do, minimum that we needed to do to turn in,  
18 because everything we did we had to write a  
19 report. And the first thing that you do is you  
20 do a preliminary analysis of what you feel you  
21 can put on that property that meets the zoning  
22 codes. In the meantime, what you're doing ...  
23 now, again, with the Kushner Companies, we did  
24 that in-house because we had our own engineer,  
25 so there was only five of us in the

1 construction department and all five of us ...  
2 well, four of us worked under the engineer, and  
3 we had various responsibilities. Under due  
4 diligence, we had to physically go out and look  
5 at the site. We also physically had to meet  
6 with either local representatives or County  
7 representatives and question them as to what  
8 kind of conditions or restrictions would be on  
9 this particular property, what's going on on  
10 this property. Then, we would take that  
11 information and we would continue on with our  
12 due diligence onsite. Now, in two cases that  
13 I had where we would be discharging downstream,  
14 what I did was I met with the homeowners that  
15 would be mostly affected and explain to them  
16 we're purchasing a property, this is what we're  
17 going to do, and where is your critical area of  
18 most concern. And once we would establish  
19 that, then we would try to design around that.  
20 But what we always did was we ...

21 **THE COURT:** Excuse me. Excuse me just a minute.  
22 I'm beginning to wonder now about relevance.  
23 What is the relevance of this?

24 **MR. CHANDLER:** We will close this loop before the  
25 end of our case. We've got part of a

1 deposition transcript that we're going to  
2 introduce later on in which there's testimony  
3 about what due diligence Bill Clark Homes did  
4 in this case, and I want to compare that to the  
5 kind of due diligence that somebody, an  
6 experience developer, might do.

7 **THE COURT:** I'm going to take you at your word on  
8 that.

9 **MR. CHANDLER:** Okay. Let me just say that based on  
10 the experience and the knowledge that Mr.  
11 Yelinko has gained in this, we would offer him  
12 as an expert in land development.

13 **MR. BARNETT:** Your Honor, I would object to that.  
14 But could I address the statement about  
15 relevancy since he's mentioned my client? I  
16 don't see that any inquiry into whether Mr.  
17 Clark's company did due diligence before it  
18 entered into the contract with the Shaad  
19 Company to get the stormwater permit at issue  
20 has anything whatsoever to do with the  
21 stormwater permit. That's the only issue in  
22 this case.

23 **MS. SHAHID:** Your Honor, as to offering the witness  
24 as an expert, we've had no previous  
25 identification that this witness would be

1           offered as an expert in land development, and  
2           certainly we would need the opportunity to voir  
3           dire him, but we would object at the outset on  
4           grounds of notice.

5   **MR. CHANDLER:** Let me just say that I served a set  
6           of Answers to Interrogatories in this case in  
7           which Mr. Yelinko was listed as an expert  
8           witness. And Judge, if you'll bear with me a  
9           minute, I'll find a copy of that.

10   **MR. BARNETT:** I don't want to interrupt Mr. Chandler,  
11           but I think he identified him as an expert in  
12           reviewing plans, and that's when we were  
13           actually arguing about what we think the case  
14           is actually about, which is the stormwater  
15           permit, stormwater plans, and where water goes,  
16           and that sort of thing, and whether there would  
17           be a worsening of flooding. Now Mr. Chandler  
18           seems to be wanting to take us into a world of  
19           the contract between Mr. Clark and the Shaad  
20           Company and due diligence about real estate  
21           purchases. I cannot fathom what that has to do  
22           with this case. It will certainly keep us here  
23           a lot longer, but ...

24   **MR. CHANDLER:** Your Honor, could we take a brief  
25           break and let me find this Supplemental Answers

1 to Interrogatories. It looks like they're not  
2 where I thought they were in the file and I may  
3 need a few minutes to ...

4 **THE COURT:** About ten minutes?

5 **MR. CHANDLER:** That's fine.

6 **THE COURT:** Thank you.

7 (Break from 2:40 p.m. until 2:52 p.m.)

8 **THE COURT:** All right. Everybody here? What did we  
9 find with respect to prior notice?

10 **MR. CHANDLER:** Your Honor, Answers to Interrogatories  
11 actually were served a little bit late in this  
12 case. Apparently, I had overlooked them. I  
13 remember Ms. Shahid reminded me. I submitted  
14 answers to interrogatories on January 15, 2009.  
15 In the list of expert witnesses, we listed  
16 Frank Yelinko. For each person known to the  
17 parties to be a witness, a summary sufficient  
18 to inform the other party of the important  
19 facts known to be observed by such witness. We  
20 said Frank Yelinko lives in Deerfield, is  
21 thoroughly familiar with the subdivision and  
22 golf course, plans for development and all  
23 issues in this case. We kept wondering why  
24 they never took his deposition. We listed him  
25 as an expert; they never took his deposition.

1 MS. SHAHID: Well, Your Honor, actually, I found the  
2 discovery responses from September that I  
3 believe were yours, or maybe I read the date  
4 wrong where ... can I look at the document you  
5 were just reading from. He was disclosed as an  
6 expert on January 15th, and that was on the  
7 heels of two affidavits that were submitted in  
8 December where he opined as to the merits of  
9 the stormwater plan and the storm ... the  
10 drainage plans and the stormwater modeling. So  
11 I did not understand that he was being offered  
12 as a witness in land development, but I will  
13 withdraw my objection on the basis of notice at  
14 this point, just explain to the Court why I was  
15 surprised by it because of the assumptions I  
16 drew from the December affidavits. However, I  
17 don't believe he has established any  
18 qualifications as an expert in land  
19 development. The qualifications that we heard  
20 were very constructed oriented, project  
21 management-oriented. Land development is a  
22 whole spectrum of other activities, usually  
23 engaged in or in part by a field of  
24 professionals.

25 THE COURT: Well, you're right on target there. I

1 think it's too broad a term. It seems like  
2 that your experience has been limited to  
3 residential and commercial development; is that  
4 right?

5 **MR. YELINKO:** I also worked in environmental areas.

6 **THE COURT:** Well, do you want to voir dire?

7 **MS. SHAHID:** Well, and then we would of course renew  
8 on the basis of relevance, Your Honor. As we  
9 go back through the issues identified in the  
10 pre-hearing statement, and of course, there's a  
11 dichotomy here between pre-hearing statements  
12 and discovery, but the lack of due diligence or  
13 the insufficiency of the contractual  
14 arrangements between the intervenor and the  
15 respondent has never been an issue that we were  
16 aware of before today. But if Your Honor is  
17 giving me the opportunity to voir dire, I will.  
18 I'm just telling the ... giving the Court one  
19 more chance from keeping us from prolonging  
20 this debate, I guess.

21 **MR. CHANDLER:** Let me just say that I think we've  
22 done enough with the due diligence issue. I'm  
23 offering him as an expert at this point  
24 because, you know, Your Honor, several months  
25 ago, one of the hearings we had in this case



1       you asked us to try to separate out the Coastal  
2       Management Program issues from the rest of the  
3       case. I'm getting ready to ask Mr. Yelinko  
4       some questions that relate to public interest  
5       and feasible alternative uses of this property.  
6       And that's where we intend to go with this in  
7       terms of opinions. And we would be glad to  
8       limit his expertise to commercial and  
9       residential development of land.

10   **MS. SHAHID:** I would like the opportunity to voir  
11       dire.

12   **MR. YELINKO - VOIR DIRE EXAMINATION BY MS. SHAHID:**

13   **Q:** Mr. Yelinko, as I understood your earlier  
14       testimony, you don't hold any professional  
15       licenses or certifications in the state of  
16       South Carolina, correct?

17   **A:** I do not.

18   **Q:** Okay. And with regard to the field of land  
19       development, have you ever designed a  
20       residential or commercial development?

21   **A:** I did.

22   **Q:** All right. When I say design, did you actually  
23       lay it out on the paper?

24   **A:** Yes, ma'am.

25   **Q:** And where was that when you did that?

1 A: That was up in Glen Harbor in northern New  
2 Jersey.

3 Q: How long ago was that?

4 A: That was in 1991, '92.

5 Q: All right. And was that development that you  
6 designed in Glen Harbor, New Jersey, approved  
7 by a zoning board or a local zoning authority?

8 A: It was.

9 Q: Did you design that development in conjunction  
10 with any professionals such as an engineer or  
11 an architect?

12 A: I did.

13 Q: All right. And was it the architect or  
14 engineer's stamp or seal that went on the plan  
15 when it was submitted for approval?

16 A: Yes, ma'am, it was.

17 Q: You were not able to stamp or seal the plans,  
18 correct?

19 A: No.

20 Q: But you assisted the professional in developing  
21 the design, right? Is that what you did?

22 A: I guess you could state it that way. I  
23 designed it; they accepted it, signed it and  
24 sealed it.

25 Q: All right.

1 A: That's not an uncommon thing in development  
2 because engineers usually hire technicians to  
3 work under them and a lot of time, technicians  
4 do the work, the engineer reviews it and he  
5 says ...

6 Q: Okay.

7 A: ... I have no problem signing it and sealing  
8 it.

9 Q: So your role in that was something comparable  
10 to a technician?

11 A: That's correct.

12 Q: Okay. And here in South Carolina, you  
13 understand that nobody can take a development  
14 plan to local government unless it has been  
15 stamped and sealed by an engineering or  
16 architectural firm?

17 A: Yes, ma'am, I understand.

18 Q: Okay. When you talk about your, or when Mr.  
19 Chandler offered you as an expert in land  
20 development, are you talking specifically about  
21 your ability to subdivide a parcel, to propose  
22 a design to subdivide a parcel?

23 A: What am I talking about?

24 Q: Uh-huh (affirmative response).

25 A: I'm talking about what I feel my ability is

1           pretty much design any project once I do my due  
2           diligence and investigate the property.

3       Q:     Okay.   All right.   So you think you have the  
4           ability to design roadways?

5       A:     Yes.

6       Q:     Design drainage systems?

7       A:     Yes.

8       Q:     Design neighborhoods?

9       A:     Yes.

10      Q:     You've had no architectural training or  
11           schooling?

12      A:     I took a series of planning classes with  
13           Professor Moskowitz from Rutgers University  
14           back in the early '70s.

15      Q:     Okay.

16      A:     And in those classes, it was ... it was  
17           classified as new town design, is how he  
18           classified it. And what we ... it wasn't a  
19           graduate course; it was a certificate course  
20           ...

21      Q:     For planning?

22      A:     For planning; that's correct.

23      Q:     Now, planning's a little bit different from  
24           design; don't you agree?

25      A:     Not necessarily. A lot of planners end up in

1 the design process.

2 Q: But my understanding of planning is that  
3 planning is planning for communities. Not  
4 necessarily taking pen to paper and drawing or  
5 designing, but planning what would be  
6 appropriate in areas. Is that your  
7 understanding of the distinction?

8 A: I would have to relate to a specific project  
9 that I worked on regarding planning.

10 Q: Okay.

11 A: And it had to do with the approval of a golf  
12 course community center and how the project ...  
13 the main person involved was the planner. And  
14 golf course architects basically are planners.  
15 That's how they get their certification.

16 Q: But here you're being offered as an expert in  
17 land development. Now, what I understand land  
18 development to be is taking a parcel,  
19 determining the zoning, finding an appropriate  
20 use of that parcel in terms of designing the  
21 subdivision and the types of uses that you want  
22 in that parcel, recording the ... obtaining the  
23 necessary approvals and recording the  
24 subdivision plat and then selling and making a  
25 profit, in most markets. Is that how you

1 define land development?

2 A: Yeah. You develop land to make a profit.  
3 Absolutely.

4 Q: All right. And in the course of being a land  
5 developer, you would consult with your  
6 engineers. You might hire a planning group,  
7 but the land developer is actually the person  
8 who is in charge of taking that subdivision  
9 plat, walking it through the approvals, getting  
10 it recorded, obtaining the financing and  
11 marketing and selling the property, right?

12 A: Not ... the developer cannot submit for permit  
13 processes without ... every jurisdiction I ever  
14 worked in had to be signed and sealed by an  
15 engineer. It didn't matter who did the work as  
16 long as the engineer signed and sealed it.

17 Q: Well, I don't want to belabor this point and  
18 waste much more of the time on this. But let  
19 me just explain to you my understanding of a  
20 land developer and then I'm going to ask you if  
21 you've ever done this in South Carolina. I  
22 represent a lot of land developer. My  
23 understanding of the land developer, they're  
24 the person that acquires the financing to  
25 purchase the parcel, pays the bills to

1       subdivide and develop the parcel, design and  
2       develop the parcel, hires the professionals to  
3       consult with, obtain recording and approval of  
4       the subdivision plan, and then market the lots.  
5       That's my Mary Shahid school of what a land  
6       developer does. I'm not saying it's right or  
7       wrong. For what projects have you performed  
8       that role, being the person who obtains the  
9       financing, buys the land, hires the  
10      professionals, puts it all down on paper, gets  
11      it approved and sells it?

12    A:   When I worked for Ramapo Bank of Wayne, New  
13          Jersey, and when I worked for Kushner  
14          Companies, basically that was my  
15          responsibility.

16    Q:   Okay.

17    MS. SHAHID: That's all I've got, Your Honor. I'm  
18               still concerned that what I understand to be  
19               land development in the state of South Carolina  
20               is getting mixed up with lots of other  
21               disciplines and functions.

22    MR. BARNETT: Your Honor, I don't have any more  
23               questions to follow up on land development. As  
24               Ms. Shahid has described it, I would agree with  
25               her. But based on what Mr. Chandler said, I

1 want to make sure he's not being offered now as  
2 an expert in all the other issues in the case,  
3 like waters of the state, stormwater planning  
4 and so forth.

5 MR. CHANDLER: If you would like him to, Stan, I  
6 will, but ...

7 MR. BARNETT: I just didn't know ...

8 MR. CHANDLER: ... I only offered him in one  
9 subject.

10 MR. BARNETT: I don't mean to be dense, I just want  
11 ... I wasn't sure what you were doing. I just  
12 wanted to be clear about that.

13 THE COURT: Well, first of all, I'll have to agree  
14 that it may turn out that the relevance is  
15 marginal or is not there. But in the event  
16 that it is, I don't want to deprive him of the  
17 opportunity to put forward his evidence. To  
18 qualify as an expert in South Carolina, I want  
19 to hear from you all on this, it's not  
20 necessary that you be a professional in a field  
21 necessarily, but you can qualify by practical  
22 experience and, in fact, merely enough  
23 knowledge to know more than the trier of fact  
24 is probably enough to qualify an expert.  
25 Anybody disagree with that?



1 MS. SHAHID: I would have one reservation to make  
2 subject to your final ruling, Your Honor.

3 THE COURT: All right. Well, and I don't know the  
4 nomenclature precisely either, but I think I  
5 understand what he's talking about when he said  
6 "land development" and he's really talking  
7 about this piece right in here and the way  
8 water flows on it. And if you get beyond that,  
9 Mr. Chandler, I'm going to limit him. But I'm  
10 going to qualify him for land development, as  
11 I understand it, in subdivisions and  
12 commercial.

13 MR. CHANDLER: All right, sir. Thank you. Before I  
14 get into the questions under his expertise in  
15 that area, I want to back up and address  
16 something that I just moved over in my notes  
17 and forgot to mention.

18 MR. YELINKO - CONT. DIRECT EXAMINATION BY MR.

19 CHANDLER:

20 Q: Mr. Yelinko, the ponds that are shown on  
21 Petitioner's Exhibit 10, in your work on the  
22 golf course and any of your investigations, do  
23 you know whether any of these ponds are used to  
24 irrigate this golf course?

25 A: No, sir, none of these ponds.

- 1 Q: None of them are used for irrigation?
- 2 A: No, sir.
- 3 Q: How is this golf course irrigated?
- 4 A: The golf course has a main pumping station for
- 5 the South Course off of fairway number 11,
- 6 which is the back nine of the golf course.
- 7 Q: And that's up in ...
- 8 A: Keep on going up. Right up ...
- 9 Q: There ...
- 10 A: Up in this area (indicating).
- 11 Q: Okay. Off the map ...
- 12 A: That's correct.
- 13 Q: ... at another site.
- 14 A: Yeah.
- 15 Q: And it's pumped down to this front nine?
- 16 A: It is. And there's a booster station right
- 17 here (indicating).
- 18 Q: Okay.
- 19 A: We can bring enough pressure up to this area up
- 20 in here, but we need a booster pump to force
- 21 this back area here.
- 22 Q: Okay. Now, also want to address the issue of
- 23 the public interest in this project. Do you
- 24 believe that there is a public interest in
- 25 building 278 single family homes on this

1 property?

2 MS. SHAHID: Your Honor, I object. I don't  
3 understand how qualifying him as an expert in  
4 land development ...

5 THE COURT: I sustain that objection.

6 MR. CHANDLER: Your Honor, I would just submit if  
7 you'll bear with me a minute, that the question  
8 of what is or what is not in the public  
9 interest doesn't even require expertise there.  
10 It's a matter of, I think a lay opinion can be  
11 expressed about public interest in a particular  
12 project.

13 THE COURT: I'm unmoved.

14 MR. CHANDLER: Your Honor, I'd like to make a proffer  
15 of testimony on this.

16 THE COURT: You may do so.

17 Q: Mr. Yelinko, do you see any public interest in  
18 building 281 homes on this property?

19 A: Not without addressing the flooding issues, no,  
20 sir.

21 Q: Do you see anything about this project that  
22 would harm the public interest?

23 A: Yes, sir.

24 Q: And what kind of harm would occur?

25 A: Additional flooding if not more flooding.

1 Q: Okay. And if this project is built ... well,  
2 let me back up a minute. We've already had  
3 some studies that have been done talking about  
4 dealing with existing flooding at the site and  
5 at least one of those studies called for an  
6 additional 90 acre-feet retention of flood  
7 waters.

8 A: Correct.

9 Q: Is 278 houses are built on this site, how are  
10 we going to obtain additional sites to provide  
11 that retention?

12 MS. SHAHID: I object, Your Honor. He's not  
13 qualified to answer that question.

14 THE COURT: Well, he's still making a proffer, I  
15 think, aren't you?

16 MR. CHANDLER: Yes, sir.

17 MS. SHAHID: I'm sorry. I thought we'd moved on.

18 A: You're asking me what the consequences are if  
19 this development is built, is that what you ...

20 Q: Yeah. I mean, what are the consequences of  
21 this development on finding additional  
22 detention areas for stormwaters?

23 A: Under the proposed plan, there are no  
24 additional areas. The whole ... look, even  
25 though I'm not, don't have a certification in

1           any engineering field or planning field or so  
2           forth, I learned by going to classes and  
3           school, there's only one way you solve a  
4           flooding problem, you solve the problem by  
5           lowering the grade. If you cannot lower the  
6           grade, you have to allow for a secondary  
7           discharge. In this particular project, there  
8           is no lowering of the grade; there's a raising  
9           of the grade. The issue that was brought up in  
10          the LPA report defined a secondary outlet was  
11          never addressed. Now, I had many meetings with  
12          County representatives in regards to this and  
13          the answer always came back from the County  
14          they don't have the funds to even make  
15          discovery or to purchase land for secondary ...

16   **MS. SHAHID:** Your Honor, I object.

17   **THE COURT:** Right.

18   **MS. SHAHID:** And I know we're in the proffer, Your  
19          Honor, but hearsay from the County would be  
20          inappropriate.

21   **THE COURT:** Sustained.

22   **Q:** Mr. Yelinko, let's move on to another topic  
23          here. based on your experience as someone who  
24          has developed property, other than developing  
25          this old golf course as a 278 unit development,

1 do you think there are other feasible  
2 alternatives profitable uses of this land?

3 A: Yes, sir.

4 MR. SHAHID: Your Honor, I object. I think he's  
5 capable of identifying alternatives, but  
6 there's been no foundation laid as to whether  
7 or not the proper feasibility analysis has been  
8 done to determine if they're feasible. I  
9 certainly think under the expertise that you  
10 found that he can identify alternatives, but  
11 not feasible alternatives. Feasibility  
12 analysis, Your Honor, involves a myriad of  
13 factors when you're talking about land  
14 development and it's a very specific thing  
15 related to your investment in the property, all  
16 the limitations on the property, all the  
17 permits required for the property, your zoning,  
18 on and on and on.

19 THE COURT: I understand what you're saying. Mr.  
20 Chandler?

21 MR. CHANDLER: The question that's on the table  
22 right now is does he think there are feasible,  
23 other feasible uses. It's kind of a yes or no  
24 answer.

25 THE COURT: I think what she's saying that if you

1           limit it to other alternatives without getting  
2           into the complex area of feasibility, that she  
3           would not object.

4   **MS. SHAHID:** That's correct, Your Honor.

5   **THE COURT:** Yeah.

6   **MR. CHANDLER:** Okay.

7   **Q:** So are there other alternative uses of this  
8           property?

9   **A:** Yes, sir. And in 2005 I thought we were  
10          working on it with the golf course operator.

11   **Q:** Okay. And that called for a redesign of the  
12          golf course?

13   **A:** That's correct.

14   **Q:** And possible other construction on the site?

15   **A:** Yes, sir.

16   **Q:** And would it be feasible to continue to use it  
17          as a golf course?

18   **A:** Yes.

19   **MS. SHAHID:** Your Honor, I object. I do not  
20          understand how he, who does not own the  
21          property, does not pay the note to the bank,  
22          have the ability to testify whether it's  
23          feasible or not to maintain it as a golf  
24          course. He can say it's an alternative, but he  
25          has not laid a foundation to say it's feasible

1       and I don't believe he can. Is he an expert in  
2       golf courses, too, and how much money they  
3       make? I mean, I just think I've got to draw  
4       the line, Judge.

5       **THE COURT:** Mr. Chandler?

6       **MR. CHANDLER:** I don't think you have to own a piece  
7       of property or pay the taxes on it or pay the  
8       note on it to express an opinion about how it  
9       can be used profitably. Mr. Yelinko has  
10      testified that he's been involved in the  
11      development of golf courses and multi-use  
12      properties. I think we've laid a foundation  
13      for him to testify to this.

14      **THE COURT:** I'm going to overrule the objection.  
15      Ultimately it will go to the weight I think  
16      rather than the admissibility anyway.

17      **Q:** Okay. And I believe you've already answered  
18      that question.

19      **A:** Well, the reason I answered it the way I did  
20      answer it was if you remember earlier I  
21      mentioned to you that I met with Mr. Shadd, I  
22      met with Mr. Gary Shaw, and I also met with  
23      Porter Gibson, the golf course architect, and  
24      in those meetings they were onsite in the back  
25      of my house. And what they were trying to do



1 was they wanted to maintain the golf course for  
2 the benefit more or less for Mr. Shaw because  
3 Mr. Shaw was out of a job. The North Course  
4 was sold; South Course was closed down and my  
5 understanding in the conversation was would our  
6 association be willing to sit down and work out  
7 an arrangement with them. And I said yes,  
8 under the condition that we address the  
9 flooding. And what I understood from their  
10 representation was they were trying to figure  
11 out in the redesign what their cost was and  
12 would we be willing to negotiate something with  
13 them for units somewhere on the golf course as  
14 condos and townhouses where it was clustered  
15 and, therefore, they would still be able to  
16 maintain the golf course and help us resolve  
17 our flooding problems. And I said I believe we  
18 would work along with you 100 percent on that.

19 Q: Okay.

20 A: Unfortunately, if that would have happened, we  
21 would never be here today because we would have  
22 solved our problem. Unfortunately, that didn't  
23 happen.

24 Q: Okay.

25 A: Unfortunately for us.

1 Q: Do you have an opinion whether the golf course  
2 property can be turned into a residential  
3 development and still solve the flooding  
4 problem?

5 A: If the area of concern with the flooding was  
6 taken into consideration where we could lower  
7 the grade, provide for ...

8 MS. SHAHID: Your Honor, at this point I'm going to  
9 object. I was giving the witness the benefit  
10 to see which expertise he would be answering  
11 from, and I believe he has strayed into now  
12 engineering expertise and stormwater  
13 management. He's not offered as an expert in  
14 civil engineering. He's commenting now on how  
15 you can design a residential development and  
16 solve the flooding problem.

17 MR. CHANDLER: Your Honor, I think this is, for  
18 what's it worth or the weight of the testimony  
19 situation here. We acknowledge he's not a  
20 residential professional engineer, but he is a  
21 land developer and we think he can provide this  
22 opinion and you can decide how much weight to  
23 give it.

24 THE COURT: I agree with that, Ms. Shahid.

25 A: What I was referring to was, back again, the

1 LPA study. If you incorporate what that study  
2 was trying to address, and then design around  
3 that, yes, then you could ... you could build  
4 residential.

5 Q: Okay.

6 A: My whole concern is if you do not address the  
7 flooding problem, what have you done here? I  
8 mean, you're going to create a situation ... I  
9 mean, to run a continuous 60 inch pipe around  
10 this whole property is not going to solve the  
11 problem because you can only ... there's only  
12 a certain amount of volume that's going to go  
13 through that pipe. Now, if the grade of what's  
14 proposed is higher than our grade and anything  
15 malfunctions, the drop box in the pond,  
16 disconnection of a pipe, a blockage or anything  
17 else, we're not going to just flood anywhere  
18 from two to four feet, we're going to go  
19 several feet underwater. That's the issue here  
20 that has not been addressed. And it can be  
21 addressed. It was partially addressed. And if  
22 you look at the LPA report, it addresses it  
23 very specifically. But yet, in this plan, it's  
24 like the LPA report never existed. And the  
25 reason I get a little passionate about that is

1 I happened to work ... I was asked by Mr.  
2 Gosnell to work with Scott Robadux from LPA,  
3 because at that time, the County did not have  
4 the staff that they have today. And Mr.  
5 Gosnell said to me, he said, "Frank," he said,  
6 "I would really appreciate it ..." it was a  
7 volunteer thing, I didn't get for this. "I  
8 would really appreciate it if you would work  
9 with him. I don't have the time. Take him  
10 around and show him the problems, show him what  
11 ... you know, what you feel is the main concern  
12 for your people. Would you be willing to do  
13 that?" And I said, yes, I would. And I did.  
14 And we had many meetings, a lot of discussions.  
15 I would say this. It was very difficult to  
16 come up with any kind of solution because of  
17 some variables. Now, look, everybody has  
18 property rights. You own a piece of property,  
19 you have a right to sell it. Somebody has a  
20 right to come in and purchase it; somebody has  
21 a right to develop it. We get back ... I know  
22 there was an objection regarding due diligence,  
23 but you know, if you don't investigate what the  
24 problems are and then try to design around  
25 those problems, you're creating liability for

1           yourself. In this particular case, I believe  
2           everybody would be liable. If this was built  
3           and we went seven, eight feet under water and  
4           now we don't have 22 homes that flood out, but  
5           we have 122 homes that flood out, who's going  
6           to be responsible?

7       Q:    Thank you, Mr. Yelinko. Please answer any  
8           questions the other attorneys may have.

9       MR. YELINKO - CROSS-EXAMINATION BY MS. SHAHID:

10    Q:    Who is Gary Shaw?

11    A:    Gary Shaw was the golf course operator.

12    Q:    Okay. You did some work for Gary Shaw on the  
13           North Course?

14    A:    I did.

15    Q:    And is that where you ... and you did some work  
16           for him on the South Course, too?

17    A:    I did.

18    Q:    And were you hired by Gary Shaw? Were you paid  
19           by Mr. Shaw?

20    A:    The North Course project, no. The South Course  
21           project, yes.

22    Q:    Okay. And the work that you did on the South  
23           Course consisted of filling in a pond?

24    A:    It consisted of replacing old corrugated pipe  
25           that rusted through and collapsed, which

1        prevented drainage off the golf course. When  
2        you design a golf course your fairways you  
3        design with a crown so that the water when it  
4        rains, it can run off, and now you have to  
5        provide for the water to get out. And what  
6        they did years ago is use steel corrugated pipe  
7        that rotted out, collapsed. Now they ... when  
8        they got a severe rain condition, they'd have  
9        to close the golf course down for two, three  
10       days, maybe more until the water drained off.  
11       So he asked me to go investigate the whole  
12       drainage system and to come up with a plan of  
13       how to ... how to correct it.

14      Q:    Okay. That's what you did for Mr. Shaw for the  
15           South Course?

16      A:    That's what I did.

17      Q:    Okay. Did you also participate in filling in  
18           one of the ponds so that the hole would play  
19           better?

20      A:    Most of the pond was already filled in. We  
21           took ... what we did was where we excavated  
22           out, we had a lot of fill material. We moved  
23           it over into several different areas, but one  
24           area was that pond we talked about.

25      Q:    I'm going to show you what was marked, or

1 admitted into evidence as Petitioner's Exhibit  
2 9, which you identified as the plat of one that  
3 you took title to the property, and I'm going  
4 to ask if you can publish for me the note on  
5 the bottom of Exhibit 9 that begins, "All  
6 streets."

7 A: Looks like, "All streets, easements and ..." I  
8 can't read the rest of that.

9 Q: Could it be "golf course areas?"

10 A: It could be.

11 Q: Okay. "All streets, easements and golf course  
12 areas."

13 A: "Shown on the plat are private and are not  
14 intended to be dedicated as ..." some kind of  
15 use.

16 Q: Could it be public use?

17 A: Could be.

18 Q: I see P-U-B ...

19 A: It's possible.

20 Q: ... L-I-C. Okay.

21 A: Uh-huh (affirmative response).

22 Q: And you're aware that the golf course is and  
23 has been private property since you purchased  
24 your property?

25 A: Yes.

1 Q: Okay. The golf course was not a public amenity  
2 available to homeowners in Deerfield Phase IIB  
3 unless they paid memberships, correct? Or were  
4 guests of members?

5 A: No, there were no requirements, to my  
6 knowledge, of memberships. It was a daily fee  
7 course. You paid your fee and played golf.

8 Q: But you didn't have the right just to walk on  
9 the course and play? It wasn't a public  
10 amenity or free amenity available to you as a  
11 homeowner?

12 A: You had the right to walk on and play if you  
13 paid your greens fee.

14 Q: Okay. And who did you get permission from when  
15 you built your bulkhead on your property that  
16 encroached onto the property of the golf  
17 course?

18 A: I got the approval from the golf course  
19 superintendent.

20 Q: And who was that?

21 A: His name was Matt, M-A-T-T, Kroochek (ph.)

22 Q: Did he actually give you a recorded easement or  
23 deed for that property?

24 A: No, he did not.

25 Q: All right. And did you have to pay him for



1           that property?

2       A:     No, I did not.

3       Q:     And how many feet do you believe you encroach  
4           on the golf course?

5       A:     What I was told to do was go the exact distance  
6           of my neighbor, which was approximately ten  
7           feet.

8       Q:     Okay. Ten feet wide. How long?

9       A:     I believe my lot in the back there is somewhere  
10          around 90 feet.

11      Q:     Okay. And Mr. Hubbard, is he your neighbor?

12      A:     Hubbard?

13      Q:     I think his name is Hubbard. You demonstrated  
14          was on a photograph marked Exhibit 64.

15      A:     No, no, no. No.

16      Q:     That wasn't his name?

17      A:     No. He lives ... he lives down the street.

18      Q:     He also had an encroachment on the course?

19      A:     He did.

20      Q:     And your neighbor has an encroachment on the  
21          course?

22      A:     Ma'am, all the golf course fronted lots have an  
23          encroachment on the golf course.

24      Q:     About the dimension of your encroachment?

25      A:     In some cases less; in some cases more.

- 1 Q: Okay. You would agree with me that the ponds  
2 located on the South Course are interconnected,  
3 correct?
- 4 A: They're all connected.
- 5 Q: And you would agree with me that those ponds  
6 are currently functioning as stormwater ponds  
7 on the South Course, correct?
- 8 A: Yes and no.
- 9 Q: Okay.
- 10 A: The reason I say that is because the ponds  
11 generate a continuous flow of water offsite.  
12 And when we were onsite with Mr. Thompson from  
13 DHEC, we addressed that issue and he told me  
14 that ...
- 15 MS. DIECK: Objection, Your Honor, that's hearsay.
- 16 THE COURT: Sustained.
- 17 MR. CHANDLER: Your Honor, what he was getting ready  
18 to say was what someone from DHEC said which is  
19 an admission against a party.
- 20 THE COURT: It wasn't really ... I'll have to hear  
21 it to know whether it's an admission or not, I  
22 guess.
- 23 MR. YELINKO: Do you want me to answer that?
- 24 THE COURT: Yes.
- 25 A: We had a discussion onsite about the continuous

1 runoff and I said to him, I believe that in my  
2 analysis and investigating and watching how the  
3 water table worked here that I noticed that  
4 during a full moon and high tide that we would  
5 have an extreme runoff and the ponds would  
6 elevate approximately three to four inches.  
7 And his opinion was he felt there were streams  
8 under the ground and that the streams were  
9 creating the continuous runoff because the  
10 water never, even in a drought situation in  
11 2006, the water never stopped running off the  
12 site. So whether those ponds served a purpose  
13 for stormwater, I'd say partially. I believe  
14 the canals served more of a purpose for  
15 stormwater runoff than the ponds did.

16 Q: By continuous runoff, you mean there's a  
17 continuous offsite discharge?

18 A: Yes, ma'am.

19 Q: Okay.

20 **THE COURT:** I'm going to overrule your objection,  
21 Ms. Dieck.

22 **MS. SHAHID:** Your Honor, it's my understanding that  
23 there was no objection to 19A and 19B. I'd  
24 asked to use it in my opening, so at this time,  
25 I would offer Exhibits 19A and 19B into

1 evidence.

2 MR. CHANDLER: No objection.

3 THE COURT: Without objection.

4 (Respondent Deertrack Golf's Exhibit Numbers 19A and  
5 19B were admitted into evidence.)

6 MS. SHAHID: I'm going to hand you up a copy, Your  
7 Honor.

8 Q: And ask you, Mr. Yelinko, if you've ever seen  
9 this diagram which I obtained from Horry County  
10 which was part of a PowerPoint presentation  
11 that they made at their numerous meetings on  
12 this project?

13 A: I believe so. I've seen many, many plans.

14 Q: Okay. You understand that 19A is intended to  
15 reflect the existing ponds of the development?

16 A: It looks that way.

17 Q: And 19B is Horry County's rendition of the  
18 ponds that will be located on the development  
19 post-development?

20 A: Uh-huh (affirmative response). That's correct.

21 Q: You would agree with me there's substantially  
22 more water and more ponds in 19B than there is  
23 in 19A?

24 A: With the exception of the fact of the canals.  
25 This plan here does not depict properly the

1           canals.    For instance, that canal right here  
2           (indicating), that canal is almost 50 feet  
3           wide.    That doesn't tell us that on that plan.

4   Q:   Well, I think I'm focusing right now on the  
5           ponds, the exhibit showing the stormwater  
6           ponds.

7   A:   Uh-huh (affirmative response).

8   Q:   And there are more ponds post-development than  
9           there are pre-development, right?  More acres  
10          of ponds?

11  A:    (No response.)

12  Q:    It sure looks like a lot more blue on 19A than  
13          on 19B.

14  A:    Well, I disagree.  This color blue is darker  
15          and this is lighter, so it kind ... that throws  
16          it off right there to begin with.

17  Q:    Okay.  So you're telling ....

18  A:    If you have a light color and a dark color, the  
19          dark color is always going to stand out more  
20          than the light color.

21  Q:    You've studied, you've obviously studied the  
22          stormwater management plan and modeling that  
23          was done by ETS, correct?

24  A:    Partially.

25  Q:    Okay.  You've been at numerous public meetings

1 for this project, correct?

2 A: I have.

3 Q: And you're telling me today that you don't know  
4 that the developer is creating substantially  
5 more ponds post-development than currently  
6 exists pre-development?

7 A: He's representing that. What I'm saying is the  
8 area of the ponds that he's proposing, okay, if  
9 you just calculate pond area, I would say it  
10 might become equal to what it was. Because if  
11 you take into consideration the drainage  
12 canals, which are substantive (sic), and in  
13 some of the reports ...

14 THE COURT: Which are what?

15 MR. YELINKO: Very substantial.

16 THE COURT: Substantial?

17 MR. YELINKO: Right.

18 A: In some of the reports, by the engineer that  
19 designed this project, he's calling the canals  
20 ponds, but yet, on those maps that you're  
21 showing me ....

22 Q: Okay.

23 A: ... they're not ... they're not listed as  
24 existing ponds.

25 Q: So you're not willing to admit that we're

1 creating more ponds than currently exist on the  
2 site today, despite the exhibit that I showed  
3 you and despite all the information that's set  
4 forth in the permit application?

5 A: I'd have to do further study on that.

6 Q: Okay. Now I'm going to show you what's been  
7 marked as Exhibit 7 and ask if you're familiar  
8 with Exhibit 7?

9 **THE COURT:** That's Respondent Deertrack's Exhibit 7,  
10 and you previously mentioned 19A and 19B were  
11 Respondent Deertrack's also.

12 A: This is the July 1, 2008, revised report from  
13 LPA.

14 Q: No, this isn't from LPA. This is from ETS.

15 A: Or E ... I'm sorry, ETS. I'm only familiar  
16 with that in reviewing it with our engineer.

17 Q: This is a document you reviewed with your  
18 engineer, Mr. Powell?

19 A: Preliminary.

20 Q: All right.

21 **MS. SHAHID:** Your Honor, at this time I would offer  
22 Respondent's Exhibit 7 into evidence.

23 **MR. CHANDLER:** Your Honor, there's not a foundation  
24 laid for this document. He may have seen this,  
25 he may have looked at it with the engineer, but

1 we don't know who wrote this document. It  
2 hasn't been authenticated or, I mean, there's  
3 not a proper foundation for this document at  
4 this time.

5 **MS. SHAHID:** He's an expert, Your Honor, he's given  
6 all kinds of opinions and he said he's looked  
7 at this with the engineer. I think I have the  
8 right to examine him on this document, but I'll  
9 do a little more in the foundation department  
10 if you'd like.

11 **THE COURT:** He has looked at this?

12 **MS. SHAHID:** He said he went over it with Mr. Powell.

13 **MR. CHANDLER:** Well, when I was questioning him on  
14 direct when he started talking about the LPA  
15 study, which he has seen ...

16 **MS. SHAHID:** This is ETS.

17 **MR. CHANDLER:** ... there were ... well, it's maybe a  
18 different study. But I mean, the same  
19 principle applies. When he started talking  
20 about what the LPA study said, there were  
21 objections, which were sustained.

22 **MR. BARNETT:** I don't think those were to the LPA  
23 study, Your Honor. It was to another study.  
24 I don't think ... we never objected.

25 **MS. SHAHID:** It was this other ... yeah, we never



1 objected to LPA. It was the other study that  
2 he mentioned that we weren't familiar with.

3 **MR. CHANDLER:** Well, it's my recollection that any  
4 time he started talking about what a study  
5 said, it was objected to and it was sustained  
6 and he wasn't allowed to say that.

7 **MS. SHAHID:** He's offered opinion, Your Honor, and I  
8 have the right to challenge him on the basis of  
9 the opinions that he gave on direct testimony.  
10 He's reviewed this document. This is a  
11 document prepared by the developer's engineer.

12 **THE COURT:** I overrule the objection.

13 **MS. SHAHID:** Thank you.

14 **Q:** I'm going to show you the drainage report for  
15 the Old South Course that was prepared by ETS.  
16 Do you know who ETS is, Mr. Tom Bevins?

17 **A:** I do.

18 **Q:** You understand that they're working for Bill  
19 Clark Homes to obtain these approvals?

20 **A:** Uh-huh (affirmative response). I do.

21 **Q:** And if you would turn to page 12 of this  
22 report. And I'm on page 12 of the report, and  
23 I would ask that you publish this paragraph  
24 beginning with "The proposed stormwater  
25 system." For the purposes of Mr. Chandler,

1           it's the first, second, third full paragraph  
2           down on page 12.

3       A:    You want me to read that paragraph?

4       Q:    Yes, sir.

5       A:    "The proposed stormwater system design would  
6           incorporate 15.5 acres of ponds with an average  
7           of 4.89 feet of difference between the normal  
8           water level and the top of the bank. This  
9           would create a total of 74.0 acre-feet of  
10          storage capacity resulting in an increase of  
11          approximately 65 acre-feet of additional  
12          storage capacity."

13      Q:    Okay. So you cited from, I believe it was an  
14           LPA study, that looked for ...

15      A:    Ninety acre ....

16      Q:    ... 90 acre fee?

17      A:    That's correct.

18      Q:    And according to ETS in their report to Horry  
19           County, which is Respondent's Exhibit 7, the  
20           proposed plan of their ponds goes as far as  
21           creating, was it 64 acre-feet or 65 acre-feet?

22      A:    That's correct, except that needs to be  
23           clarified. What that plan is doing, that is  
24           taking into consideration the 270 acre or the  
25           278 home site. That has nothing to do with

1           what the existing grade is or what is inside of  
2           Phase IIB.

3       Q:    Okay.

4       A:    It has to do with what he's going to develop,  
5           because he's going to raise the grade between  
6           two to six feet, and he's raising his ponds  
7           because there's only two ways you store water  
8           in ponds, either at the larger ponds, widen  
9           them out, or you've got to bring the rim of the  
10          pond, the top of the pone, you have to bring it  
11          up.   Now, what they're doing here in order to  
12          get their water to run to these ponds that he's  
13          addressing in the report, is he's raising all  
14          his building pads, he's raising the road.   So  
15          all the water that runs off either has to run  
16          to the back of the lots into a swale system or  
17          has to run through the front to the gutter  
18          system in the road, and then discharge by  
19          gravity into the ponds.   So if you build your  
20          pond up and you're down here, your water's not  
21          going to run uphill, so you've got to raise  
22          everything up, including your building pads.  
23          Now, what was interesting, I mentioned earlier,  
24          there were 17 revisions to this plan, and the  
25          original first six sets of plans ...

1 MS. SHAHID: Your Honor, I understand his need to  
2 clarify his answer. I believe he's gotten  
3 outside of the bounds of clarifying his answer  
4 at this point.

5 MR. CHANDLER: I don't think he's finished.

6 THE COURT: I think I need to hear this.

7 MS. SHAHID: Okay.

8 THE COURT: I want to hear it.

9 A: In the first six sets of plans, each one of the  
10 proposed lots showed a building pad elevation.  
11 Every plan after that, the building plan  
12 elevation was removed from the plan. Now, I'm  
13 not saying that there's anything wrong there,  
14 but when you want to calculate stormwater and  
15 elevations, you need to show all your  
16 elevations, and your final elevation and height  
17 is your building pad elevation. You have  
18 ponds, you have roads, you have lots, and you  
19 have building pads. So the whole point here is  
20 that study addresses correctly his project, but  
21 nowhere in that study does it take into  
22 consideration what our problem is. Nowhere.

23 Q: Well, to the extent that you were looking for  
24 90 acre-feet of retention or storage, and the  
25 ETS plan increases, except their statements on

1 page 12 of the report, the ETS plan increases  
2 storage, it does address to some degree the LPA  
3 recommendations, correct? As to storage?

4 A: No, ma'am.

5 Q: As to increased storage?

6 A: No, ma'am, not at all.

7 Q: Okay. So none of this storage that we've  
8 added, none of this land that we've given up  
9 for ponds matters? When the County had their  
10 consultant predict that we needed ...  
11 additional storage was needed in the area and  
12 we gave up ample land and created all the ponds  
13 that you've seen and all the acreage that you  
14 wrote about in Exhibit 12, that doesn't matter?  
15 That doesn't address the LPA recommendation?

16 A: It does not.

17 Q: Okay. Thank you. Now, let's talk about the  
18 LPA studies. You spoke extensively about a  
19 study that you had reviewed. And I'm going to  
20 show you what has been marked as Respondent  
21 Deertrack's Exhibit 26 and represent to you  
22 that is the LPA study from 2000, and ask if  
23 that is the study that you reviewed?

24 A: Looks like it.

25 Q: Okay. Now, Mr. Yelinko, are you aware that

1           there were two other iterations of the LPA  
2           Caropines and Deerfield storm drainage outfall  
3           study?

4       A:     There were two updates.

5       Q:     All right.   And I'm going to show you what's  
6           been marked as Respondent's Exhibit 8, which is  
7           Revision of Caropines and Deerfield Storm  
8           Drainage Outfall Study and ask that if you're  
9           familiar with that document?

10      A:     I've seen this document.

11      Q:     Have you reviewed that document?

12      A:     Not extensively, I have not.   I only reviewed  
13           it to the point of whether it addressed our  
14           issue, our flooding problem, and it does not.

15      Q:     And I'm going to show you what's been marked as  
16           Deertrack Exhibit 18, which is identified ...  
17           which is titled the Caropines/Deertrack Storm  
18           Drainage Outlet Study dated July 2008 prepared  
19           by LPA and ask you if you're familiar with that  
20           document?

21      A:     I briefly reviewed this document with our  
22           engineer and came away concluding that this  
23           document also does not address our issue.

24      Q:     Okay.

25      A:     What it does address, primarily, is the new

1 pond that was installed by the County.

2 Q: Okay. Is it safe to say then that you are most  
3 familiar with Respondent's Exhibit 26 and not  
4 with the other two reports; not as familiar  
5 with the other two reports? Is that a safe  
6 statement?

7 A: I'm only familiar with those additional reports  
8 to the extent that it does not cover our  
9 flooding issue in Phase IIB compared to the  
10 original report. The original report was  
11 contracted by the County to be performed to  
12 specifically address our issue.

13 Q: Back in 2000?

14 A: Back in '99, 2000.

15 Q: Right. And then revisions were made to the  
16 report at later dates, correct? Two separate  
17 revisions?

18 A: Revisions were made to the report according to  
19 what our engineer could conclude was to take  
20 into account the latest one, what impact this  
21 new development would consist of. What kind of  
22 impact it would consist of.

23 MS. SHAHID: And, Your Honor, at this time I would  
24 offer into evidence Deertrack Exhibit 26, which  
25 is the Caropines/Deerfield Storm Drainage

1 Outfall Study of 2000.

2 MR. CHANDLER: No objection.

3 THE COURT: Respondent's Deertrack Number 26 admitted  
4 into evidence without objection.

5 (Respondent Deertrack Golf's Exhibit Number 26 was  
6 admitted into evidence.)

7 Q: Okay. And I would ask you to turn to page 1.1  
8 of that study. 1-1, I'm sorry. And doesn't it  
9 say that, "The purpose of this drainage study  
10 is to develop and evaluate alternative  
11 solutions for relieving flooding in the  
12 Caropines and Deerfield subdivisions," correct?  
13 That's the statement made by LPA as the  
14 purpose.

15 A: Yeah. And then if you go on it says, "Without  
16 adversely impacting conditions downstream."

17 Q: Okay. And you ...

18 A: That's where the 90 acre-feet came into play on  
19 the golf course.

20 Q: I've got you. And then I would ask if you'd  
21 turn over to page 4.2, which is about a fifth  
22 of the way through the document. It is where  
23 they begin identifying alternatives.  
24 Alternative 1 ...

25 A: 4.1?



1 Q: I'm sorry. Thank you. 4.1.1 on page 4-2.

2 A: Okay.

3 Q: All right. And you would agree with me that  
4 Alternative 1 was identified as constructing  
5 five retention ponds as specific locations?  
6 That's your understanding of the first  
7 alternative?

8 A: Pretty much.

9 Q: Okay. Then if you would turn over several  
10 pages to page 4-7 where they talk about  
11 Alternative 2.

12 A: Uh-huh (affirmative response).

13 Q: And isn't it your understanding that  
14 Alternative 2 was an alternative that included  
15 increasing pipe sizes at several locations,  
16 including the pipes under US Route 17 and  
17 modifying outlet structures at Lake Elizabeth  
18 and Dogwood Lake? That was Alternative 2?

19 A: That's correct.

20 Q: Okay. And then if you can turn to page 4-11,  
21 which is Alternative 3. And Alternative 3  
22 you'll agree with me is described as a  
23 combination of providing storage upstream of US  
24 17 Business, increasing pipe sizes at several  
25 locations, and modifying the outlet structures

1 at Lake Elizabeth and Dogwood Lake, correct?

2 A: That's correct. It also addressed increasing  
3 on the golf course from 90 acre-feet to 122  
4 acre-feet.

5 Q: Okay. And I see where you're looking at the  
6 chart, Table 4.6, Plantation Drive, where they  
7 estimated minimum storage required of 122 acre-  
8 feet, right?

9 A: That's correct.

10 Q: And then they note there is some area available  
11 on the existing golf course and within the  
12 residential subdivision?

13 A: That's correct.

14 Q: Okay. And then you go to the conclusions 5-1,  
15 and it's my understanding that the conclusion  
16 that the LPA group determined would provide the  
17 most relief during the 25-year storm was  
18 Alternative 3, which included detention ponds,  
19 I guess, new storage area, upgrading and  
20 replacing several pipes, and modifying the  
21 outlet structures at Lake Elizabeth and Dogwood  
22 Lake. Is that your understanding of the final  
23 conclusions of the 2000 study?

24 A: Excuse me. Unless I'm missing something, I  
25 cannot find page 5 ... I got it ...

1 Q: I'm sorry.

2 A: I found it. I found it. It's stuck in here in  
3 a different location. I've got it.

4 Q: If you would look at the conclusions and tell  
5 me is that consistent with your understanding?

6 A: That was the conclusion that Mr. Robadux made  
7 if all of these things were followed, yes.

8 Q: Right. That Alternative 3, which was a  
9 combination of storage and improvements to  
10 existing structures, right?

11 A: That's correct.

12 Q: Okay. And the County has, in fact, at its own  
13 expense without soliciting any private funds  
14 from any of the affected property owners over  
15 the past year begun to implement some of the  
16 improvements recommended in the LPA study,  
17 right?

18 A: That's correct. But only after we are assessed  
19 in our tax bill for a stormwater fee charge.

20 Q: Okay. Well, I stand corrected. It was money  
21 that the County collected through ordinance  
22 countywide that has now been directed to  
23 stormwater improvements?

24 A: Right. And our 124 property owners pay that  
25 fee, and we have not derived one cent benefit

1 from the County.

2 Q: And every other property owner affected by the  
3 ordinance, not just those in your neighborhood,  
4 also paid that fee, correct?

5 A: Every ... yes, ma'am.

6 Q: Okay. And the improvements that the County has  
7 installed over the past few years include a  
8 outlet structure that I believe you testified  
9 to because you were concerned about the trash  
10 screen in the structure, right?

11 A: That's correct.

12 Q: Okay. That's one of the improvements. It's an  
13 improved or large outlet structure?

14 A: That was not recommended by LPA. The LPA  
15 report did not recommend that. Their  
16 recommendation was to run all the way with a  
17 72-inch pipe.

18 Q: Okay. Well, the LPA report did recommend  
19 modifying the outlet structures at Lake  
20 Elizabeth and Dogwood Lake, and that's been  
21 done, right?

22 A: After that was done.

23 Q: Okay. And LPA did recommend upgrading and  
24 replacing pipes and that has also been done,  
25 correct?

1 A: Partially.

2 Q: Okay. And, in fact, two 60-inch pipes have  
3 been installed to increase capacity?

4 A: That's correct.

5 Q: And those are 60-inch pipes that are receiving  
6 flow from your neighborhood?

7 A: From the whole drainage basin.

8 Q: Okay. And those have been installed in  
9 accordance with the LPA report. And the County  
10 has acquired some land and increased some  
11 storage capacity, correct?

12 A: That's not totally correct.

13 Q: Okay.

14 A: And the reason I say that is if you look at the  
15 elevations that the County provided me as to  
16 stormwater elevations, they never dropped the  
17 elevation. We're at ... our discharge off of  
18 Phase IIB is 15 five. The discharge at that  
19 drop spot is 15 five.

20 Q: Okay. I guess you don't have to agree with me  
21 that it's worked or not, but it is my  
22 understanding that near your outfall, the large  
23 outfall that you indicated to Mr. Chandler on  
24 this drawing, there has been some acquisition  
25 by the County of land and some excavation in

1           increase in storage near this outfall. You're  
2           not familiar with that?

3   A:    Yeah, I'm absolutely familiar with that. I ...

4   Q:    Okay. Now, I'm not ...

5   A:    ... thought your question was that they  
6           followed the LPA plan ...

7   Q:    Well ...

8   A:    ... and I was addressing that. They did not  
9           follow the LPA plan.

10   Q:   Well, they did provide for additional storage?

11   A:   No, ma'am. They did not.

12   Q:   If they dug a new pond near your outfall,  
13           bought land and dug a pond near your outfall,  
14           that's providing for additional stormwater  
15           storage.

16   A:   No, ma'am. At a public meeting in front of the  
17           Surfside Council and Stormwater Department, Mr.  
18           Garigen and Mr. Gosnell testified that the  
19           reason they were doing this was to prevent  
20           trash from flowing down into Surfside Beach and  
21           into Lake Elizabeth and eventually out to the  
22           Atlantic Ocean. And that's in the minutes of  
23           the meeting of Surfside Beach.

24   Q:   Now, I'm not talking about the outlet and the  
25           screen and everything. I'm talking about the

1 expansion of a pond near the outfall, the  
2 actual increase in acreage of the size of a  
3 pond near the outfall.

4 A: Well, the reason they did the pond the way they  
5 did it was they had ... they had to collect the  
6 trash. Now, once you collect the trash, what  
7 do you do with it? You can't let it build up,  
8 because as the three and a quarter inch rain  
9 showed us, when that built up, it inverted the  
10 screens and it backed up the water into  
11 Deerfield. If we would have had another inch  
12 of rain, we would have went under water.

13 Q: Okay. Well, I think ... let me see if I ...

14 A: So your ... no, your question to me if I'm ...  
15 am I asking this wrong or are we missing  
16 something here? I thought your question was  
17 did the County follow the LPA report?

18 Q: No. My question is if the LPA report said  
19 let's get some additional storage, isn't it  
20 true that the County has acquired land and dug  
21 an additional pond near the outfall structure  
22 to increase storage in the Caropines/Deerfield  
23 drainage area?

24 A: I agree they built a pond, but it was not for  
25 additional storage, because additional storage

1           you have to lower the pond ...

2       Q:     Okay.

3       A:     ... not raise the pond.

4       Q:     All right.   Well, I think you and I'll just  
5           have to agree to disagree and tomorrow Mr.  
6           Garigen can explain to us why that land was  
7           acquired and that pond was built.

8       A:     Absolutely.

9       Q:     You testified that the last time that you  
10           witnessed major or minor flooding in your  
11           neighborhood was in 2002, correct?

12      A:     That's right.

13      Q:     So it's been seven years, correct?

14      A:     That's right.

15      Q:     And during that seven-year period, the County  
16           has possibly implemented some, if not many, of  
17           the recommendations of the LPA group made in  
18           2000?

19      A:     If you're asking my opinion, they haven't  
20           addressed any of the issues in the 2000 LPA  
21           report.

22      Q:     So you think it's just pure luck that you  
23           haven't been flooded since 2002?

24      A:     Ma'am, we haven't had a major rainstorm.

25      Q:     Okay.   Hurricane Hanna blew through not too



1 long ago. You didn't suffer any flooding when  
2 Hurricane Hanna came through.

3 A: What was the date of that storm? We had ...  
4 we've had windstorms from offshore hurricanes,  
5 but we haven't taken on much water.

6 Q: Okay. If you'll hold on just a minute, I can  
7 find my rainfall data for Hurricane Hanna. I  
8 have ... here we go. You're aware that we were  
9 under a hurricane watch, tropical storm warning  
10 for Hurricane Hanna on September 8 ... in  
11 September of 2008, and I'll tell you the date  
12 as soon as I figure out how to read ...  
13 September 6, 2008, Hurricane Hanna came  
14 through, dumped almost five inches of rain in  
15 the area, according to the rain data.

16 A: Not in our area.

17 Q: Well, how far are you from Brookgreen Gardens?

18 **THE COURT:** I'm going to ask him not to respond to  
19 that.

20 Q: All right. Have you ever Googled or searched  
21 the rainfall data?

22 A: I have.

23 Q: Okay. What station would you recommend I use?

24 A: What station do I recommend?

25 Q: Other than Brookgreen Gardens?

1 A: There's a station in Myrtle Beach, but I ...  
2 everything is on NOAA. You just ...

3 Q: Okay.

4 A: NOAA will give you a full description of where  
5 and what and ...

6 Q: All right. I'm going to represent to you that  
7 I obtained these records from NOAA and that  
8 Hurricane Hanna came through and dumped almost  
9 five inches of rain in September of '08, early  
10 September '08. Do you recall any flooding of  
11 property in September of '08 in your  
12 neighborhood?

13 A: No homes ... no houses flooded.

14 Q: Isn't it true that when you sat down with Mr.  
15 Smith and Mr. Murphy, one of the proposals that  
16 you put on the table was that Mr. Murphy and  
17 Shaad Properties walk away from their contract  
18 with Bill Clark, or walk away from marketing  
19 the property and dedicate the golf course to  
20 public use?

21 A: No.

22 Q: Or dedicate the golf course as conservation  
23 property?

24 A: No, ma'am. What I ... what I asked was I asked  
25 Mr. Murphy if I could put up a ... put in a

1 backup contract to purchase the golf course.

2 Q: Okay. So you're denying that at any time you  
3 said to Mr. Murphy and to the Shaad Family  
4 representatives that you would like to see all  
5 development plans abandoned for the golf course  
6 and the golf course be an easement for open  
7 space or undeveloped land?

8 A: I personally did not say that. There were  
9 several people at that meeting at the McNair  
10 Law Firm. It might have been said by someone  
11 else. I don't know. I don't recall that.

12 Q: Okay. I don't think that's a suggestion that  
13 the Shaad family's attorneys would put on the  
14 table. But you don't recall stating that?

15 A: Only put in a contract, a backup contract to  
16 purchase the golf course.

17 Q: Okay.

18 MS. SHAHID: Your Honor, if I could have just a  
19 minute to review my notes and go through my  
20 exhibits. I think I'm about to wrap up.

21 THE COURT: Yes, ma'am.

22 Q: Would you be surprised to learn that the actual  
23 difference in elevation ... the actual worst  
24 case scenario in difference in elevation  
25 between the new neighborhood proposed and the

1 existing neighborhood is approximately a foot?

2 A: I would be very surprised.

3 Q: Okay. So what is it your understanding that  
4 the difference in elevation is? How many feet  
5 do you think it is?

6 A: It ranges anywhere between two and six feet,  
7 depending on what point you're looking at.

8 Q: Okay. And if it were demonstrated to you that  
9 it is only in limited areas and it is only  
10 approximately 12 inches in difference in  
11 elevation, would that relieve some of your  
12 concerns in that regard?

13 A: No, ma'am.

14 Q: Okay. Did you understand that the owner of the  
15 golf course was not able to make money  
16 operating it as a golf course?

17 A: No, ma'am, I was not aware of that. My  
18 understanding was they were ... it was ... they  
19 rented it. They were collecting a monthly  
20 rental fee for the golf course from TLC Golf.

21 Q: Does it surprise you ... would it surprise you  
22 to learn that they were losing money on it  
23 operating it as a golf course?

24 A: I don't have any comment. I don't have no way  
25 of knowing that or making any kind of comment

1 on it. That was never my area.

2 Q: When is the last time you looked at ... let me  
3 just ... when is the last time that you looked  
4 at that new outlet structure installed by Horry  
5 County located adjacent to the old Bi-Lo  
6 parking lot?

7 A: I would say I believe it was Monday morning.

8 Q: Okay. I'm going to show you what I've marked  
9 as Respondent Deertrack's Exhibit 21A and 21B  
10 and ask if you can identify those?

11 A: Yes. This was the original structure on the  
12 first page, and the second page is the revised  
13 structure.

14 Q: Okay.

15 A: Because the first structure didn't work..

16 Q: Okay. And are you aware that the County  
17 received complaints regarding the function of  
18 the structure and the function of the trash  
19 screen, and that they went in and fixed it?

20 A: They reconstructed it ...

21 Q: Okay.

22 A: ... which we ended up with this design. I  
23 stated earlier that the ... what the County  
24 engineering department and the stormwater  
25 manager told me was that this design was to

1 prevent the trash from building up and  
2 inverting the screens into the chamber.

3 Q: Uh-huh (affirmative response).

4 A: Therefore, they brought it about approximately  
5 a foo, and they put it on about a 33 degree  
6 angle, and the concept that ... the idea was  
7 that as the trash builds up, it would flow up  
8 over the top.

9 Q: Right.

10 A: Therefore, it would not block the screen.

11 Q: Right.

12 A: And my comment to them at the meeting was  
13 there's only thing you neglected and that's the  
14 algae build-up, and because of the extreme heat  
15 we have here several months out of the year,  
16 the algae is absolutely unbelievable, because  
17 we struggle with that on the ponds on the golf  
18 course.

19 Q: Okay. So you don't think this improvement  
20 shown on page 21(B) is working the way it's  
21 supposed to work?

22 A: It can't work. It's restricted.

23 Q: Okay. And that's based on your visual  
24 observation of it?

25 A: No. That's based on last Saturday's

- 1 observation where we had a three-quarter inch  
2 rainfall ....
- 3 Q: Right.
- 4 A: ... and the water backed up over two feet.
- 5 Q: Okay. When you say "backed up," can you  
6 describe what you're talking about?
- 7 A: Yeah. It's ... there's an embankment on this  
8 side over here (indicating) that runs the whole  
9 back end of the pond.
- 10 Q: Uh-huh (affirmative response).
- 11 A: There's a water mark on there and a debris mark  
12 after Saturday's storm.
- 13 Q: Okay. So the levels in the pond raised?
- 14 A: Yeah, well it blocked out. They came down here  
15 on, it was Monday, the Horry County crew to  
16 clean it ....
- 17 Q: Okay.
- 18 A: ... and I spoke to the crew chief, and he told  
19 me, he said this is the only chamber like this  
20 that they have in the County, and he's got a  
21 very difficult time maintaining it. He said,  
22 I have to physically get in the pond to  
23 maintain it. So ...
- 24 Q: But he did come and maintain it?
- 25 A: Well, he did ... took the trash out, but he

1           created a silt problem because the only way he  
2           could get down was to wiggle down the  
3           embankment which caused an erosion and he moved  
4           all the silt down into the front of the  
5           chamber.

6       Q:    Okay.    I get it.    You think this is a dumb  
7           idea?    You don't think this is working?

8       A:    It's in the wrong location, and it's the wrong  
9           design.

10      Q:    Okay.    We'll let Mr. Garigen also address that  
11           in the morning.    And let me show you what was

12           ....

13      MR. CHANDLER:   Do you have copies of these exhibits  
14           we can look at?

15      THE COURT:   Here's some, too.   I have two.

16      MS. SHAHID:   Okay.   I can get them.

17      Q:    Are you familiar with this photograph?

18      A:    I absolutely am.

19      Q:    Okay.    And what is this a photograph of?

20      A:    This is a photograph on the opposite side of  
21           the chamber going downstream with a forced  
22           water main that restricting about 40 percent of  
23           the opening of the 60-inch pipe.

24      Q:    Okay.    Now, these are the two 60-inch pipes,  
25           the new improvements?



1 A: That's correct.

2 Q: All right. Now, when I look at this picture,  
3 I'm having a hard time agreeing with you that  
4 it restricts 40 percent of the opening. Where  
5 do you get that figure, 40 percent? It sure  
6 doesn't look like 40 percent.

7 A: Well, when you calculate ... I went over this  
8 with our engineer. When you calculate the pipe  
9 and the fact that nothing can discharge under  
10 the pipe and you allow for the free flow of  
11 water over the top of that pipe, you're  
12 creating a drag, and once you create that drag,  
13 you are restricting the volume of through that  
14 pipe, and we looked at it. The problem was he  
15 was not able to get inside the chamber. It's  
16 a very huge, deep chamber. It's so huge that  
17 there's a column in the middle to hold up the  
18 concrete lid on the chamber. So we were going  
19 by the photographs. And when you look at the  
20 elevations on the photographs and compare that  
21 with the volume that these pipes can handle, he  
22 concluded that we're probably talking in the  
23 neighborhood of 40 percent restriction.

24 Q: Okay. So your conclusions about this pipe are  
25 based on your conversations with Mr. Powell?

1 A: That's correct.

2 Q: And his conclusion that that's a 40 percent  
3 obstruction or restriction?

4 A: Uh-huh (affirmative response).

5 Q: Okay. Now, what makes you say that's a water  
6 line?

7 A: I met with Grand Strand Water and Sewer, and my  
8 understanding when I was out at their  
9 engineering office and reviewing their  
10 criteria, first of all, they do not allow any  
11 kind of domestic water supply or any type of  
12 sanitary sewer to run through any type of  
13 drainage chambers. And when I spoke to -- I  
14 can't remember the gentleman's name -- he  
15 checked with a field engineer that approved  
16 this, and he said how they approved it, the  
17 County told them it would cost them in excess  
18 of \$140,000 to move that one. And they asked  
19 for an exemption of approval if they ... if  
20 they sleeved it with ductile iron pipe would  
21 Grand Strand Water and Sewer engineering  
22 department approve that. So what he told me  
23 was it was a field decision by their field  
24 engineer. He says normally we would never  
25 allow anything like this.

1 Q: Okay.

2 A: I don't know of any permitting agency when it  
3 comes to utilities that would allow utilities  
4 to run through a storm system.

5 Q: You're not familiar with situations called  
6 conflicts where there's conflicts between  
7 different types of pipes, etcetera?

8 A: You move them. This type could have very  
9 easily been moved.

10 Q: If it's a gravity sewer line, could it have  
11 been easily moved?

12 A: A gravity sewer line, no. You'd have to put in  
13 a pump station.

14 Q: Okay.

15 A: The gravity sewer line actually sits right  
16 underneath this pipe.

17 Q: Hasn't Deerfield Phase IIB Property Owners  
18 Association been involved in efforts to  
19 downsize or down zone this property to change  
20 the zoning designation for this property?

21 A: No, ma'am.

22 Q: Isn't that on the agenda of Deerfield Phase II  
23 Property Owners Association to work with local  
24 government to see if the zoning could be  
25 changed for this property to have less dense

1 development?

2 A: Nothing that I've been involved with.

3 Q: You haven't had any conversations with local  
4 officials, your elected officials on County  
5 Council or county staff, including Mr. Garigen,  
6 related to exploring whether or not the  
7 property could be re-zoned so that it's less  
8 dense?

9 A: No, ma'am.

10 Q: You're involved, or at least your neighborhood  
11 association is a party in a case in the Court  
12 of Common Pleas challenging the land  
13 development plan, correct, on appeal?

14 A: No, ma'am. What we're challenging is we  
15 requested a right to a hearing to produce  
16 evidence that the staff had erred and had made  
17 the wrong ... it was coming to the wrong  
18 conclusion.

19 Q: Right. The staff gave final approval, final  
20 preliminary subdivision approval, to Bill Clark  
21 Homes plans back last fall, and you're  
22 challenging that approval, correct, in the  
23 Court of Common Pleas?

24 A: No, ma'am. It's ... no ... let me ...

25 Q: Deerfield Phase IIB Property Owners is not the

1 plaintiff in the Court of Common Pleas  
2 appealing that decision?

3 A: No, ma'am. What we're contesting is we were  
4 denied a right to a hearing to present evidence  
5 or present our case that the staff, if they  
6 were going to approve this plan, is in error.

7 Q: You didn't want the plan approved?

8 A: (No response.)

9 Q: That's what you're challenging. You didn't  
10 want the plan approved, correct?

11 A: The plan as it's proposed is in error.

12 Q: Okay.

13 A: And that's why we appealed it. We asked for a  
14 hearing. Janet Carter, who is the head of  
15 planning and an attorney for the County, said  
16 you have every right to a hearing. She  
17 addressed the hearing. When we got to the  
18 hearing, the planning commissioner heading the  
19 meeting, he got off on the wrong foot. He  
20 thought we were there for a protest, and that's  
21 not what we were there for.

22 Q: Okay.

23 A: And he allowed me five minutes to introduce my  
24 evidence, and I said it's impossible for me to  
25 do this in five minutes, and I appealed to the

1 Board for more time. The attorney for the  
2 Board said, "Mr. Chairman, you run the Board.  
3 That's your decision." He said, "Mr. Yelinko,  
4 I'll allow you five minutes and that's it."  
5 And when the five minutes was up he said, your  
6 five minutes were up, and I was in the middle  
7 of introducing some documents. He said, "Your  
8 five minutes are up. Sit down." The next day  
9 I got ... received a call from Ms. Carter and  
10 she apologized and said, "Mr. Yelinko, I'm  
11 sorry what happened yesterday. That's not what  
12 was supposed to happen." She said ...

13 Q: Mr. ....  
14 A: ... "I'm going to be sending you a letter as to  
15 what your rights are." She said, you have 30  
16 days to appeal this decision in the Circuit  
17 Court of Appeals.

18 Q: And the decision was a vote by the planning  
19 commission to give final preliminary approval  
20 to the subdivision plat for the neighborhood  
21 that's been proposed by Bill Clark Homes?

22 A: That's correct.

23 Q: That's the decision you're challenging?

24 A: That was my understanding.

25 Q: Yes. Okay.

1 MS. SHAHID: Your Honor, can I consult for a minute  
2 with Mr. Barnett?

3 THE COURT: Yes, ma'am.

4 (Pause)

5 MS. SHAHID: That's all I have, Your Honor.

6 THE COURT: Mr. Barnett?

7 MR. BARNETT: Yes, Your Honor, just a few.

8 MR. YELINKO - CROSS-EXAMINATION BY MR. BARNETT:

9 Q: I am not going to replot the same ground. What  
10 you are concerned about, I take it, in terms of  
11 this plan that you have critiqued here with Mr.  
12 Chandler and Ms. Shahid is you are concerned  
13 about the flooding that your neighbors consider  
14 a risk?

15 A: Yes, sir.

16 Q: That is your sole concern?

17 A: Yes, sir.

18 Q: If a plan to develop this property in here  
19 around your current houses and in here could be  
20 devised that did not flood your home, that  
21 would make you happy?

22 A: I believe our Association could accept that.

23 Q: And you said you didn't think that it was in  
24 the public interest, in response to a question  
25 Mr. Chandler asked you, to put houses as this

1           ETS plan, Bill Clark Homes plan, proposes to do  
2           unless it solved your neighborhood's flooding  
3           problem. Is that ... did I hear you correctly?

4   A:    Yes.

5   Q:    All right. Would it be in the public interest  
6           if a plan to put houses in those areas  
7           significantly reduced the flooding problem in  
8           your neighborhood? Would that be in the public  
9           interest?

10   A:    Oh, absolutely. If you have a flooding problem  
11           and you reduce that, that in the public's ...  
12           they're the public. That's in their interest.

13   Q:    So Bill Clark Homes and Shaad Property, they  
14           don't have to completely eradicate the flooding  
15           problem which obviously you all sincerely  
16           suffer in order to be in the public interest,  
17           in your opinion? They just have to  
18           significantly reduce it?

19   A:    Well, I believe if you follow the 2000 LPA plan  
20           as it was originally intended, I think that  
21           would solve probably 90 percent if not more of  
22           our flooding problem. If you lower the grade  
23           ...

24   Q:    Mr. Yelinko, I'm asking you about the final  
25           result, not so much how we get from A to B.



1 But if the final result is to significantly  
2 reduce the flooding problem that you and your  
3 neighbors suffer, that would be in the public  
4 interest, wouldn't it?

5 A: That would be in the public interest.

6 Q: No matter how we get there?

7 A: That's correct.

8 Q: All right. Now, you testified that there was  
9 a pond, there was a pond that was filled, and  
10 you said you had some role in filling that.  
11 And you said, I think you said we or I, but let  
12 me ask you now. What was your personal role in  
13 getting that pond filled?

14 A: Originally, I had no role. When I agreed to  
15 work on the South Course to resolve the  
16 drainage system, when we excavated that  
17 drainage area out we had overburden, we had  
18 extra fill. There were portions of that pond  
19 that were not 100 percent filled in. They were  
20 ... it was still low. So we moved some of that  
21 fill into that area.

22 Q: Got you. I thought I made some notes  
23 accurately. Perhaps not. I guess the record  
24 will reflect your testimony. But I think I  
25 heard you say that the pond was filled over a

1 period of years. Is that right?

2 A: My ... to my knowledge it was.

3 Q: Okay. And you testified that the reason the  
4 pond was filled was because there's some people  
5 that kept, like I tend to do when I'm faced  
6 with a water hazard, put their balls in the  
7 pond?

8 A: Right.

9 Q: I sometimes throw them in the pond before I  
10 swing because it wastes effort otherwise.

11 A: When you ... when you go out and look at this  
12 location, the pond ... that pond was a, more of  
13 a detention pond.

14 Q: Is this the picture? It's Number 67 of y'all's  
15 Exhibits. Is that Number 67? That was the  
16 site?

17 A: Yeah, this upper area over here (indicating).

18 Q: Would you hold this up here? Would you kind of  
19 trace if you would ... not ... we don't need to  
20 mark it up. Where was the pond?

21 A: It's up in this left corner up here. This  
22 shaded area up here (indicating).

23 Q: I'm with you. So it's further up there?

24 A: Yeah.

25 Q: Okay. Is there one of the pictures that you

1 know of of the ... y'all had lots of pictures  
2 of ponds here that you put in. Is there one  
3 particular pond picture that you think looks  
4 like the pond that was filled? This is my set.

5 A: Okay.

6 Q: Just leaf through those. Don't mix them up ...

7 A: No.

8 Q: ... with yours are slicker looking than mine.

9 A: Those are ... yeah.

10 Q: I mean, not exactly. I'm just trying to get a  
11 feel for what this pond look like.

12 A: It was ... to my knowledge, it wasn't a true  
13 pond. It was more of a collection area. It  
14 held water for a period of time, and then it  
15 discharged. And that's why they filled it in  
16 because it didn't hold ... hold water per se.  
17 But when it did hold water, people were driving  
18 into this pond, so the golf course operators  
19 decided that it ... it really had more of a  
20 benefit to eliminate it for golfers than it had  
21 a benefit for water retention.

22 Q: Did it have water in it for most of the year?

23 A: Not in the summer months. It dried out in the  
24 summer months. It had water in it partially in  
25 the winter months.

1 Q: But you called it ... you would still call it  
2 a pond?

3 A: Well, I called it a pond. It collected water,  
4 so I mean, the water was ponding. You know, so  
5 if you have water ponding it's a pond.

6 Q: Did it drain into some of these ditches?

7 A: No, it more or less either evaporated or  
8 infiltrated into the ground.

9 Q: Your location of the pond, that picture 67 was  
10 right here next to this ditch is where you had  
11 67, correct?

12 A: Above it where the ... where the number three  
13 tee box is.

14 Q: Okay.

15 A: It was just to the right corner of the number  
16 three tee box.

17 Q: So there was no direct connection that you  
18 could see it, but it was next to that ditch?

19 A: No, there was no direct connection. Actually,  
20 the cart path swung around in front of it, and  
21 the cart path was higher so the water couldn't  
22 discharge out. I don't see one photograph here  
23 that shows the whole outline of the pond.

24 Q: Okay. All right.

25 A: I'm sorry. I can look through these if you

- 1           want.
- 2       Q:     But none of these pictures. All right. Okay.
- 3           Did y'all get a permit to fill that pond?
- 4       A:     I was not ... that was not part of ... I didn't
- 5           ... I wasn't involved with originally filling
- 6           that pond.
- 7       Q:     So you don't know whether they got a permit?
- 8       A:     I have no idea.
- 9       Q:     Do you think a permit should have been gotten
- 10           for that pond to fill that pond?
- 11      A:     When that was done, I don't know what the
- 12           permitting regulations were at that time. You
- 13           know, it was like I said, it was done not at
- 14           one shot; it was done over a period of years.
- 15      Q:     You're not concerned about the filling of the
- 16           pond? You don't think that was a problem, I
- 17           take it?
- 18      A:     No, because what they did was by bringing the
- 19           elevation up, okay, the water ... it still
- 20           collects the water. The difference is it runs
- 21           off faster.
- 22      Q:     Okay. But your concerns, you told me before
- 23           your sole concern in this case is the flooding
- 24           that you and your neighbors suffer; is that
- 25           right?

1 A: That's right.

2 Q: So if there could be a plan that would prevent  
3 your neighbors from being flooded that would  
4 require the filling of every one of these ponds  
5 on that golf course, you wouldn't have a  
6 problem with that, would you, if it got you ...  
7 if you got your flooding problem solved; is  
8 that right?

9 A: If they could fill all those ponds and then  
10 prove to us that we're not going to flood?

11 Q: Right.

12 A: Absolutely.

13 Q: That's my point. Because what you care about  
14 is getting rid of the owners' flooding problem,  
15 not preserving the ponds?

16 A: We have several owners in here that suffered  
17 over a period of years over a quarter of a  
18 million dollars worth of damage.

19 Q: It's a bad flooding problem; don't get me  
20 wrong. I'm just ... that's your focus, isn't  
21 it?

22 A: Absolutely.

23 Q: Okay. You mentioned going fishing in the  
24 ponds. Is there any particular one of these  
25 ponds that you can recall going fishing in?

1 A: Yes, sir. I fished this pond. I fished this  
2 pond over here. I fished this pond over here  
3 (indicating).

4 Q: When was the last time you went fishing?

5 A: Christmas.

6 Q: This Christmas of 2008?

7 A: Uh-huh (affirmative response). Yeah.

8 Q: Now, those ponds are all on property owned by  
9 Deertrack Golf, Inc.; isn't that right?

10 A: That's correct.

11 Q: And your Association of which you are ... are  
12 you the head of your Association?

13 A: I'm the president at this time.

14 Q: Has initiated this administrative appeal, which  
15 is like a lawsuit, against Deertrack Golf,  
16 Inc.; is that right?

17 A: Uh-huh (affirmative response).

18 Q: Did you get permission from Deertrack Golf,  
19 Inc., before you went fishing in the pond?

20 A: No, sir.

21 Q: In December of 2008, you met with Mr. Jake  
22 Duncan to ... on a part of the old golf course  
23 property so he could look at ... look at it  
24 again, did you not?

25 A: Yes.

1 Q: Okay. Did you get permission from anybody  
2 before you went onto the golf course to do  
3 that?

4 A: No, sir.

5 Q: How did you go? Can you like ... I don't want  
6 you to mark it. Can you locate where you went  
7 using this diagram here?

8 A: Yeah.

9 Q: This is your house, isn't it?

10 A: Uh-huh (affirmative response).

11 Q: Did you go from your house to the area?

12 A: We pretty much walked the cart path.

13 Q: Okay. All right.

14 A: And then we got in the car and we drove around  
15 to this location where it discharges off the  
16 property. Because all we were trying to do is  
17 map the connections. We really didn't need to  
18 do more than walk the cart paths, because  
19 almost all the connections cross the cart path.

20 Q: But you didn't get permission from anybody ...  
21 Ms. Shahid's client before you did that, did  
22 you?

23 A: No, sir. Nobody else that walks the golf  
24 course got permission either.

25 Q: Okay. Is it common for people to walk around



1 the golf course?

2 A: Yes.

3 Q: Y'all sort of treat this open area as part of  
4 your neighborhood?

5 A: Well, the policy of the golf course when it was  
6 open for business was after hours they would  
7 allow ... because we had ... Plantation Resort  
8 at any one time had anywhere from 1,500 to  
9 2,000 residents, and they allowed them to walk  
10 and ride their bikes as long as it didn't  
11 interfere. They weren't allowed ... they could  
12 jog or ride their bikes before 7:30 in the  
13 morning or after 6:00 in the evening.

14 Q: All right. But this has gone on and you're ...  
15 you've gone to fish in the ponds and take Mr.  
16 Duncan over on to the golf course so he could  
17 develop evidence to use against the owner of  
18 the property. You don't ... that doesn't  
19 strike you as odd that you didn't ask  
20 permission to no one to their property, or even  
21 give them notice before you did that?

22 A: Well, when I met with Jason Murphy and Richard  
23 Smith, that was one of the things that we  
24 discussed regarding the maintenance of the  
25 drainage canals since the golf course operators

**DEERFIELD PLANTATION PHASE IIB VS. SCDHEC ET**

1           were no longer there and there's  
2           maintaining it. And Mr. Murphy said to me, ..  
3           said, look, he said, if this was developed by  
4           the Shaad family and John did this and these  
5           canals have to do with your drainage, he said,  
6           I think you have every perfect right to keep  
7           this drainage system open. If there's any  
8           blockage, he said I think you have as much of  
9           a right ...

10       Q: I've heard you say that before, Mr. Yelinko.  
11           You're not answering my question. I asked you,  
12           and I thought you were about to tell me that  
13           Mr. Murphy gave you all blanket permission to  
14           come onto their property for any purpose,  
15           including to develop evidence to use against  
16           them in this litigation; is that ...

17       A: Well ...

18       Q: Are you testifying, did he gave you permission  
19           to do that?

20       A: Not for any purpose. No, sir.

21       Q: That's all I asked. Now, you said you built  
22           your house, the house that you live in that's  
23           marked there in green, the little the green  
24           annotation arrows ...

25       A: Lot 539, yes, sir.

1 Q: In 1996?

2 A: That's correct.

3 Q: Did you use a stock house plan, or did you draw  
4 it up yourself?

5 A: What I did was ... it was a plan that I had in  
6 my portfolio for years that I redesigned, and  
7 I was allowed to redesign and draw my own plans  
8 in order to get a building permit because it  
9 was for my own personal residence.

10 Q: Got you. Do you have a crawlspace on your  
11 house?

12 A: No, sir.

13 Q: How high is your first floor elevation? How  
14 much higher is it than your driveway?

15 A: When I looked at the flooding elevations and  
16 what was the high and the low point in the  
17 development, I observed that two lots to the  
18 south of me was the highest point in Phase IIB,  
19 and I shot grades, and what I did was I built  
20 my first floor 18 inches above the center line  
21 of the road.

22 Q: Okay. So, you're ... you answered my question  
23 there So, it's about 18 inches above the  
24 center line of the road?

25 A: Correct.

- 1 Q: Okay. All right. Most of your neighbors  
2 though don't have crawlspaces, do they?
- 3 A: There are very few homes.
- 4 Q: It's basically ...
- 5 A: Some are built up with crawlspaces.
- 6 Q: They're basically built on concrete slabs?
- 7 A: Yeah, most of them are slabs.
- 8 Q: So, those houses that were water ... you  
9 testified the water comes in those houses, they  
10 are not very far up from the ground, are they,  
11 the houses?
- 12 A: No. Unfortunately, some were built below the  
13 road.
- 14 Q: Okay. But you actually did some investigation  
15 before you built your house at that relatively  
16 low level?
- 17 A: Yes, sir, after I found out there was flooding  
18 in the area.
- 19 Q: Did water ever come in your house in 1999?
- 20 A: No, sir.
- 21 Q: 2001?
- 22 A: No. I've never had water.
- 23 MR. BARNETT: That's all I have.
- 24 THE COURT: Ms. Dieck?
- 25 MS. DIECK: Nothing further from the Department?

1 THE COURT: Redirect, Mr. Chandler?

2 MR. YELINKO - REDIRECT EXAMINATION BY MR. CHANDLER:

3 Q: Mr. Yelinko, has anybody ever told you not to  
4 go on that property?

5 A: No.

6 Q: Okay. And you observed other people walking on  
7 that property all the time?

8 A: Yes, sir.

9 Q: Okay. Did you do any harm to that property  
10 when you were on there?

11 A: None whatsoever.

12 Q: Now, back when this area that you called a  
13 pond, you said it was dry during the summer  
14 months?

15 A: Yeah. It was ... it's more of a detention area  
16 than anything else to collect .... see, the  
17 transition between number three tee box, or  
18 number three green ... number eight green and  
19 number nine tee box is an unusual area, because  
20 that's an area that's never been disturbed, and  
21 the ... the water has no place to go. So, I  
22 believe what happened when they designed the  
23 golf course, they elevated the green, okay?  
24 So, that was the slope around the green, and  
25 they had no place to go with the water, so they

STATE OF SOUTH CAROLINA  
ADMINISTRATIVE LAW COURT  
Docket No. 08-ALJ-07-0221-CC

Deerfield Plantation Phase IIB  
Property Owners Association,

Petitioner,

v.

South Carolina Department of  
Health and Environmental Control  
and Deertrack Golf, Inc.,

Respondents,

and

Bill Clark Homes of Myrtle Beach,  
LLC,

Intervenor.

COPY

**ADMINISTRATIVE HEARING**

\*\*\*\*\*

DAY TWO OF THREE  
Wednesday, March 11, 2009  
9:00 a.m. - 5:35 p.m.

The hearing before the Honorable John D. McLeod was taken at the Edgar A. Brown Building, 1205 Pendleton Street, Suite 224, Columbia, South Carolina, on the 11th day of March, 2009 before Andrea R. Taylor, Court Reporter and Notary Public in and for the State of South Carolina.

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1 MR. CHANDLER: Petitioners call Steve Powell.

2 THE COURT: Come up and be sworn, sir.

3 STEVE POWELL, having been duly sworn, testifies as  
4 follows:

5 MR. POWELL - DIRECT EXAMINATION BY MR. CHANDLER:

6 Q: Can you tell us your full name.

7 A: Stephen Sutton Powell.

8 Q: And, Mr. Powell, where do you live?

9 A: At 140 Wind Meadows Drive in Conway, South  
10 Carolina.

11 Q: And where are you employed?

12 A: At Venture Engineering in Conway.

13 Q: And are you one of the owners of Venture  
14 Engineer?

15 A: I am.

16 Q: And what types of work do you do at Venture  
17 Engineering?

18 A: We do all sorts of civil engineering, do  
19 residential and commercial work, we do  
20 structural, and we do some environmental work  
21 related to wetlands delineation and permitting.

22 Q: And what's your educational background?

23 A: Went to high school in Walterboro. Got my  
24 engineering degree from the United States  
25 Military Academy at West Point in 1979. Served

1 the data on the pipes. Those you can field  
2 verify. But remember, each of those, the  
3 roughness in the pipe, for example, you can  
4 verify the slope and there's a common range of  
5 roughness coefficients. But sometimes, you  
6 know, other things affect roughness. You have  
7 entrance losses and exit losses and going  
8 through different expansion-contraction  
9 coefficients, all those are things that can  
10 affect the overall flow. So you have to go in  
11 and begin tweaking those once you run your  
12 model. If they had run this model with that  
13 two-inch storm we had in March of 2001, then  
14 they could have begun tweaking a wide range of  
15 coefficients to try to more closely approximate  
16 the historic flooding. That would be a  
17 calibration process. A verification process  
18 would be to take that calibrated model, compare  
19 it to some other storm which either was  
20 historic or, you know, occurred in the future  
21 and see if it also predicted accurately that  
22 response. So you don't verify a calibration  
23 until you've looked at some other additional  
24 storm. When you have an area as prone to such  
25 severe flooding with three or ever four feet of

1 water in homes and, you know, it becomes more  
2 than imperative; it becomes a moral  
3 responsibility, a professional responsibility  
4 in my mind, that you ... you verify that your  
5 model accurately represents those conditions.  
6 And it wasn't done. It doesn't look like it  
7 was more than paid lip service to in the LPA  
8 model.

9 Q: Okay. And so do I understand that the model in  
10 the LPA study predicted peak elevations that  
11 were below what was actually experienced within  
12 this subdivision?

13 A: Yes, sir.

14 Q: And what was the difference between their  
15 predicted peak elevations and your measurements  
16 of known floods?

17 A: Well, their most recent model in a 25-year  
18 storm got up a little above about 22 and a half  
19 feet, and a two-year or the two inch rainfall  
20 that we had, and that's at Circle Drive, and  
21 the two inch rainfall that we had from March of  
22 2001 got up to 23.89 feet, almost a foot and a  
23 half higher. So it's difficult to imagine how  
24 a 7.6 inch rainfall would only produce a 22 and  
25 a half foot peak water surface elevation but

1 THE COURT: Ms. Shahid?

2 MS. SHAHID: Yes, sir.

3 MR. POWELL - CROSS-EXAMINATION BY MS. SHAHID:

4 Q: Mr. Powell, do you recall when we took your  
5 deposition in early December?

6 A: Yes, ma'am.

7 Q: Have you had an opportunity to review your  
8 comments in that deposition?

9 A: Yes, ma'am, I think so.

10 Q: You're familiar with that deposition?

11 A: Uh-huh (affirmative response).

12 Q: Or your comments in that deposition?

13 A: Yes, ma'am.

14 Q: Okay. Do you remember that you testified in  
15 that deposition that you deliberately and  
16 carefully reviewed the calculations done by  
17 ETS?

18 A: And the original calculations.

19 Q: Yes, sir. That you deliberately and carefully  
20 reviewed the ETS plans?

21 A: The original calculations.

22 Q: And you were deliberate and you were careful  
23 because you were very familiar with the  
24 flooding concerns of the property owners around  
25 the golf course, correct?

1 MS. SHAHID: No, it's multiple sheets.

2 MR. CHANDLER: Okay. There's only two sheets of e-  
3 mails attached to his deposition.

4 MS. SHAHID: Okay.

5 MR. CHANDLER: I don't have an objection to these.

6 THE COURT: All right. Without objection, Respondent  
7 Deertrack's Exhibit Number 16 is admitted into  
8 evidence.

9 (Respondent Deertrack Golf's Exhibit Number 16 was  
10 admitted into evidence.)

11 Q: And on September 27, 2007, in response to Ms.  
12 Maddock, who I believe had contacted you fairly  
13 regularly to try to get you to comment, you  
14 replied, "Tara, here is my short summary to  
15 their attorney." "Rob, I can prepare a letter  
16 if you like, but after studying the report,  
17 plans and calculations of ETS for the Old South  
18 Course, my conclusion is that drainage will  
19 likely be improved for the existing homeowners  
20 there. I can find no technical basis, from a  
21 stormwater management side, to oppose the  
22 issuance of the stormwater permit." That was  
23 your comment, correct?

24 A: Yes, ma'am.

25 Q: And you knew at that time, that ETS was relying

1 Deerfield?

2 A: Well, it's closer than the fire department.

3 Q: Okay.

4 MS. SHAHID: Your Honor, that's all I have.

5 THE COURT: Mr. Barnett?

6 MR. BARNETT: Yes, Your Honor. I've got a few.

7 MR. POWELL - CROSS-EXAMINATION BY MR. BARNETT:

8 Q: Mr. Powell, I know this is not your creation of  
9 this, are you familiar with Deerfield, the golf  
10 course and the ponds and so forth?

11 A: Yes, sir.

12 Q: Have you visited the site?

13 A: I have.

14 Q: So you're familiar ... like these sort of  
15 reflect what you recall as being ponds and  
16 ditches on the site?

17 A: Yes, sir.

18 Q: Those ponds out there at Deerfield at the old  
19 golf course, are those stormwater ponds? Do  
20 they serve a stormwater function?

21 A: Yes, sir, I'd say they do.

22 Q: Okay. And I want to confirm what I ...  
23 something I thought I heard you say in response  
24 to a question from Mr. Chandler. The golf  
25 course, so far as you are aware, was

1 MR. CHANDLER: Nothing further.

2 THE COURT: Thank you, Mr. Taylor. You may step  
3 down.

4 MR. CHANDLER: Petitioner calls Jake Duncan.

5 JOHN E. DUNCAN, having been duly sworn, testifies as  
6 follows:

7 MR. DUNCAN - DIRECT EXAMINATION BY MR. CHANDLER:

8 Q: Would you please give us your name.

9 A: My name is John E. Duncan. I go by Jake.

10 Q: Okay. And where do you live?

11 A: I live in James Island, South Carolina.

12 Q: And how are you employed?

13 A: I have my own business along with my wife.  
14 We're co-owners of an environmental training  
15 center, if you would.

16 Q: And what's the name of your ... is it a company?

17 A: Yes, sir. It's called Duncan and Duncan Wetland  
18 and Endangered Species Training.

19 Q: And what sort of work do you do as part of this?

20 A: What I'm particularly involved with is I work  
21 with wetland delineations, all aspects of  
22 wetland delineations, the training involved to  
23 do these things, the different disciplines that  
24 are associated with wetland delineations, and I  
25 also do troubleshooting and consulting on the

1 areas that had been wetland?

2 A: Yes, sir. In my opinion, it is my opinion that  
3 every one of these ponds, come through all this  
4 here, all of these were at least a portion dug  
5 out of wetland, or excavated out of wetland.

6 Q: Okay. And other than your soil samples, was  
7 there anything else about this site that you  
8 used in coming to that conclusion?

9 A: Yes, sir. Like I said, you know, soils are just  
10 one of the parameters. Okay. One of the other  
11 parameters is vegetation. So, being a golf  
12 course, most of the original vegetation has been  
13 denuded off of that and it's returned to, you  
14 know, golf course grasses or something like that  
15 out there. However, there were some remnant  
16 trees that were out lining the golf course and  
17 still in the middle of the golf course that were  
18 older than the construction date of the course,  
19 if you will. I felt like some of these trees  
20 were in the 50-year class, so they were there  
21 prior to the construction of the golf course.

22 Q: And what was it about these trees that was  
23 significant?

24 A: Well, on this part of the golf course where I  
25 determined that I thought I had Lynn Haven soils



1 It's only formed through significant water, and  
2 not allowing the vegetation to decompose, but  
3 just coat the soil extremely black when you have  
4 heavy organics in this top area. In  
5 Petitioner's Exhibit Number 62 is another  
6 picture of that, same area. And I don't know  
7 about, do you want me to go through these, too,  
8 Mr. Chandler?

9 Q: I think you've gone through enough of them.

10 A: Okay.

11 Q: Thank you.

12 A: But if you can see along this whole lake that  
13 there is multiple of these buttressing along  
14 this lake. There's not just one of two of these  
15 trees out there. They're pretty much following  
16 the whole golf course along. And it matches out  
17 pretty closely to what the soil survey is saying  
18 was out there, is what I found.

19 Q: Okay. Now, did you have an opportunity to  
20 observe connections between these different  
21 waters and wetlands?

22 A: Yes, sir. I found that all of these ponds were  
23 either interconnected within themselves and  
24 eventually leading off into a main ditch system  
25 that circled back around, or they all connected

1           this way come this way leading into a main ditch  
2           that led off the property. But all of them were  
3           interconnected.

4       Q:   Okay. And did you trace where these waters go  
5           when they leave this property?

6       A:   Yes, sir. I followed them off the property  
7           across US Business 17 all the way to the  
8           Atlantic Ocean. And I drew a map ... I drew a  
9           map of that showing these areas where I saw the  
10          connections on this, on a blown-up Google Earth  
11          map, if you will.

12      Q:   Okay. And while you were out at the property  
13          taking samples that day, did you observe any  
14          aquatic life in these waters or wells?

15      A:   Yes, sir. I saw large mouth bass in the lakes.  
16          I saw bream in the lakes. I saw numerous  
17          turtles. I saw wading birds. I saw geese,  
18          mallards. I saw a few frogs. They seemed to be  
19          acting quite happy out there.

20      Q:   Okay. And give me just a minute; I lost my  
21          train of thought. Did you see anything out  
22          there to indicate that this was not a healthy  
23          aquatic system?

24      A:   Health is relevant. Okay. Some people would  
25          consider this to be just a wonderful spot in the

1 world, you know, other people, not so much,  
2 because it has been ... it's a golf course; it's  
3 not like a wildlife preserve. However, these  
4 ponds are serving a wildlife function and value,  
5 no doubt about it. You have a, on most of these  
6 ponds you have some sort of littoral wetland  
7 edge to them. And they're providing all these  
8 algal growth inside these ponds, because you've  
9 got Gambusia mosquito fish that feed on that,  
10 and the larger fish feed on them. So you have  
11 an algae population. You have a food chain web  
12 that's already set up from the basic bottom all  
13 the way to the top predator. It's okay for a  
14 golf course, if you will, you know, I mean it's  
15 ... these places aren't what we considered if  
16 you were a wildlife biologist, there is nothing  
17 to write home about it, if you will. But, yeah,  
18 they're performing a wildlife function and value  
19 out there, no doubt about it.

20 Q: Okay. And do these wetland areas provide any  
21 other functions and values besides the habitat  
22 value?

23 A: Each one of these wetland areas provide, pretty  
24 much, all of the function and values that  
25 wetlands provide, to some degree. And that's

1 the issue when you're looking at a wetland.  
2 Most wetlands perform a suite of functions, it's  
3 just at what level each function they're going  
4 to perform. There's obviously some flood  
5 storage capacity, and that's what wetlands do.  
6 If there's a flood coming through, there's  
7 vegetation on the site so there's roughness, so  
8 it de-synchronizes flood conditions. And if you  
9 have floods it's going to have de-sedimentation  
10 out of the thing. There's going to be  
11 detoxification through uptake of these aquatic  
12 vegetation. Such as if you have a tertiary  
13 treatment plant. Typically, what they'll do is  
14 run that water through a cattail marsh at the  
15 very last little treatment. It sucks all that  
16 bad stuff out of the water. That's what these  
17 wetlands are doing. A lot of herbaceous areas  
18 like that, they're pulling these toxicants out  
19 of the water, if you will, and cleaning the  
20 water up. So, yeah, they're performing a bunch  
21 of these functions, no doubt. I'm not saying  
22 they're performing them at a high level as a  
23 virgin force or a virgin swamp, but they are  
24 performing them.

25 Q: Okay. Is there anything approaching a balanced

1 indigenious aquatic community of flora and fauna  
2 in these areas?

3 A: I think there is a food web set up already,  
4 absolutely. It's been there long enough that  
5 they sort of have an equilibrated lifestyle, if  
6 you will. There's the base population of  
7 plankton, the feeders on the plankton, the  
8 feeders on the feeders and something grabbing  
9 the top feeders out of the water. There's your  
10 bird population that's going around there, your  
11 apex predator.

12 Q: Would you be willing to call these areas the  
13 functional equivalent of an natural wetlands and  
14 ponds?

15 A: To some degree yes, sir. Yes, sir. My  
16 reservation is I'm not saying the lead the same  
17 level of functions that a virgin area would be  
18 or a very natural spot, undisturbed spot would  
19 be, but they are running these suite of  
20 functions and values. Absolutely.

21 Q: Thank You, Mr. Duncan. Please answer any  
22 questions the other attorneys may have.

23 THE COURT: Mr. Barnett?

24 MR. BARNETT: Yes, sir.

25 MR. DUNCAN - CROSS-EXAMINATION BY MR. BARNETT:

1           these areas are waters of the State of South  
2           Carolina?

3       A:   Yes, sir, I do.

4       Q:   And what is that opinion?

5       A:   Yes, sir. I believe they are also waters of the  
6           state because they are ponds and ... and or ...  
7           well, they're ponds. And that's definition for  
8           waters of the state, are they a pond.

9       Q:   And the other areas that might be described as  
10          other types of water bodies than ponds, do they  
11          fit in the same category?

12      A:   Yes, sir.

13      Q:   Thank you very much.

14      MR. BARNETT: Nothing for me, Your Honor.

15      MR. CHANDLER: Thank You, Mr. Duncan.

16      MR. DUNCAN: Thank you, sir. Thank you, Your Honor.

17      MR. CHANDLER: Petitioner calls Mr. Mike Couture.

18      MIKE COUTURE, having been duly sworn, testifies as  
19          follows:

20      MR. COUTURE - DIRECT EXAMINATION BY MR. CHANDLER:

21      Q:   Your name is Mike Couture?

22      A:   Yes, sir.

23      Q:   Where do you live?

24      A:   I live at 570 Circle Drive, it's in Deerfield  
25          Plantation, Surfside.

1 area that typically gets flooded. Does that  
2 generally match up with your experience?

3 A: Yes, sir, that's basically it. At about the top  
4 of this circle is about where the posts are that  
5 he was talking about that they close off the  
6 roads in each one of those areas to keep the  
7 cars from going through and having the wake.  
8 And approximately where my house is is probably  
9 one of the lowest points that's in there that  
10 ... where water starts coming through the front  
11 and back door probably before anybody else's.

12 Q: Okay. And do you have concerns about proposals  
13 to fill and otherwise alter these ponds on this  
14 property?

15 A: I have concerns of anything that ... that  
16 naturally would be detrimental to any current  
17 and, hopefully, future improvements that they're  
18 going to do for the drainage, and I do strongly  
19 feel that if any of those ponds were filled that  
20 it would potentially cause additional flooding,  
21 headaches, and problems.

22 Q: Thank you, Mr. Couture. If you would answer any  
23 questions the other attorneys may have.

24 A: Sure.

25 THE COURT: Ms. Shahid? Ms. Dieck?

1 and we don't have any objection to Mr. Farrell's  
2 deposition transcript, just to make the record  
3 clear.

4 **THE COURT:** All right. So a portion of Mr. Farrell's  
5 and a portion of Ms. Hicks's deposition there's  
6 no objection to. Those come in and I'll rule on  
7 Tara Maddock's by the by.

8 (Petitioner's Exhibit Numbers 85 and 86 were marked  
9 for identification purposes and admitted into  
10 evidence.)

11 **MR. CHANDLER:** Thank you. And with that, we're  
12 finished with our case.

13 **THE COURT:** Thank you. Now, Ms. Shahid.

14 **MS. SHAHID:** Yes, Your Honor. Actually, Mr. Barnett  
15 and I felt like it made more sense for him to  
16 put his witness up at this point.

17 **THE COURT:** Fine.

18 **MS. SHAHID:** Who is also, I think, a relatively  
19 short witness.

20 **MR. BARNETT:** He is, I think, Your Honor.  
21 Intervenor Bill Clark Homes will call Mr. Jeff  
22 Farrell.

23 **JEFF FARRELL,** having been duly sworn, testifies as  
24 follows:

25 **MR. FARRELL - DIRECT EXAMINATION BY MR. BARNETT:**



1 Q: Okay. Mr. Farrell, tell the Court what is your  
2 current position with Bill Clark Homes.

3 A: I'm the division president of Bill Clark Homes  
4 Myrtle Beach.

5 Q: Okay. And how long have you had that position?

6 A: Since 1997.

7 Q: And what are your responsibilities or  
8 authorities in that role?

9 A: I hire all of our employees, our subcontractors,  
10 supervise the hiring of the subcontractors. I  
11 do the acquisition of properties. I do site  
12 plan design, product design. I ... I'm not an  
13 architect, so I don't do the actual drawings,  
14 but I do the original designs and I farm them  
15 out to have those completed, which is what I've  
16 done in Myrtle Beach the whole time I've been  
17 there was just to do the site plan design and I  
18 turn that over to an engineer for the final ...  
19 final plat. And I'm instrumental in the costing  
20 of all the products and ostensibly I'm in  
21 charge from the start of the project up until  
22 the product is sold and for two years after that  
23 we warranty it.

24 Q: Okay. Now, I don't ... I'm not putting Mr.  
25 Farrell up as an expert. Mr. Farrell, I'm just

1 Course, around the front nine of the South  
2 Course.

3 Q: Okay. And what sort of discussion did you have  
4 with Mr. Meggard?

5 A: With Mr. Meggard and with his, at that time his  
6 guru, who was ... I call him a guru because he  
7 lived on the course. In fact, he was the next-  
8 door neighbor of Mr. Meggard, Tony ...

9 Q: Was his name Tony Greco?

10 A: Yes, it was. And Tony was very familiar with  
11 any flooding problems they've had in the past.  
12 They showed me probably four or five hundred  
13 pictures of past flooding, flooding that they  
14 had had in the past. And we drove around the  
15 golf course in my Jeep with a technician from  
16 ETS and myself and both of these gentlemen.

17 Q: Now, did you have one or two, or how many  
18 meetings did you have with representatives of  
19 the neighborhood?

20 A: At least 15 over a three, about a three and a  
21 half year period.

22 Q: So you say over a three and a half year period.  
23 I take it these meetings started before ETS  
24 concluded its stormwater plan?

25 A: The meetings started before I ... let me see.

1 the density by half, have they expressed an  
2 interest in when your contract would have  
3 expired with The Shaad Company?

4 A: Yes, they have. At a deposition I had, my  
5 deposition that was taken by Mr. Chandler, he  
6 and Mr. Yelinko asked me that question, isn't  
7 your contract about to run out, and when will it  
8 run out?

9 Q: Now, based on your dealings with the  
10 neighborhood and the association, what is your  
11 impression of what the goal of the neighborhood  
12 association is with respect to your project?

13 A: I think at this point in my life it's obvious  
14 they would like it to be a bird sanctuary and a  
15 park donated by The Shaad Company and maintained  
16 by The Shaad Company and for us to go away.  
17 They don't want any construction going on there  
18 ever.

19 MR. BARNETT: That's all I have for Mr. Farrell  
20 right now, Your Honor.

21 THE COURT: Mr. Chandler.

22 MR. CHANDLER: Do the other parties have ...

23 MS. SHAHID: I have a couple.

24 THE COURT: Excuse me. Go ahead.

25 MR. FARRELL - CROSS-EXAMINATION BY MS. SHAHID:

1           when does it expire, correct?

2       A:   That could be.

3       Q:   Okay.  Now, I also asked you in that deposition  
4           whether you ever walked on the property before  
5           you signed a contract.  You indicated you didn't  
6           ever walk on the property.  Isn't that correct?

7       A:   I drove my Jeep all over the property.  I didn't  
8           walk on it.  No, I didn't.

9       Q:   Okay.  You drove your Jeep out there.  Okay.

10      A:   Many, many times.

11      Q:   You know there are lakes out there?

12      A:   Yes, I do.

13      Q:   And you know they're all interconnected?

14      A:   Yes, I do.

15      Q:   And you know they all flow to the Atlantic  
16           Ocean?

17      A:   Yes, I do.  I also know they're all manmade.

18      Q:   But you don't have personal knowledge of that,  
19           do you?

20      A:   Well, I have a lot of experience in land  
21           development and the way golf courses are built.

22      Q:   Okay.  But where did you live when this golf  
23           course was built?

24      A:   I lived in ... I think this was built in '82, so  
25           at that time I lived in Chicago.

STATE OF SOUTH CAROLINA  
ADMINISTRATIVE LAW COURT  
Docket No. 08-ALJ-07-0221-CC

Deerfield Plantation Phase IIB  
Property Owners Association,

Petitioner,

v.

South Carolina Department of  
Health and Environmental Control  
and Deertrack Golf, Inc.,

Respondents,

and

Bill Clark Homes of Myrtle Beach,  
LLC,

Intervenor.

COPY

**ADMINISTRATIVE HEARING**

\*\*\*\*\*

**DAY THREE OF THREE**  
**Thursday, March 12, 2009**  
9:31 a.m. - 6:05 p.m.

The hearing before the Honorable John D. McLeod was taken at the Edgar A. Brown Building, 1205 Pendleton Street, Suite 224, Columbia, South Carolina, on the 12th day of March, 2009 before Andrea R. Taylor, Court Reporter and Notary Public in and for the State of South Carolina.

1 THE COURT: And you're representing that to me as an  
2 attorney at law licensed to practice in South  
3 Carolina?

4 MS. SHAHID: I do, Your Honor.

5 THE COURT: I'm going to have to rule against you,  
6 Mr. Chandler. Sorry. All right. Who's up?

7 MS. SHAHID: I am, Your Honor. Your Honor,  
8 Respondent Deertrack Golf calls Tom Garigen.

9 TOM GARIGEN, having been duly sworn, testifies as  
10 follows:

11 MR. GARIGEN - DIRECT EXAMINATION BY MS. SHAHID:

12 Q: Mr. Garigen, I'm going to stand over here to  
13 examine you. And to the extent that it's  
14 possible for you and comfortable for you, I'd  
15 ask you to address your remarks to the Court  
16 and not to me. Where do you reside?

17 A: Conway, South Carolina.

18 Q: Okay. And where are you employed?

19 A: Horry County.

20 Q: All right. And what is your position at Horry  
21 County?

22 A: I'm the stormwater manager.

23 Q: All right. And what are the duties of the  
24 stormwater manager for Horry County?

25 A: I run the county's stormwater management

1 program which is a department of about 25  
2 people; four million dollar a year budget. We  
3 enforce our own stormwater rules and  
4 regulations. We're also part of the DHEC's  
5 NPDES Phase II program, so we administer and  
6 review the plans currently right now under our  
7 delegated review authority with them. We're in  
8 charge of ... we do maintenance work;  
9 construction projects; as well as the  
10 development plan review process.

11 Q: Okay. And when you say maintenance work and  
12 construction projects, you're talking about the  
13 construction Horry County actually undertakes,  
14 correct?

15 A: Correct. Drainage improvement projects;  
16 capital improvement projects related to our  
17 stormwater systems. That's what we do.

18 Q: Okay. And then when you talk about plan  
19 review, tell me a little bit about what that  
20 is.

21 A: We review all the plans submitted to the County  
22 for new developments, both residential,  
23 commercial, industrial subdivisions and site  
24 plans.

25 Q: Okay. Now, how long have you been the manager

1 of Horry County stormwater?

2 A: Since 2004.

3 Q: Okay. So, five years?

4 A: Five years.

5 Q: All right. And what were you doing prior to  
6 becoming the manager of Horry County  
7 stormwater?

8 A: My position previous to that was the Deputy  
9 County Engineer ...

10 Q: Okay.

11 A: ... of Horry County. I started working at  
12 Horry County in 1994.

13 Q: Okay. You've been with Horry County since  
14 1994?

15 A: Yes, ma'am.

16 Q: And in 1994, were you hired to be the deputy  
17 county engineer?

18 A: No. At that point, when I first started, I was  
19 a civil engineering designer and advanced up to  
20 deputy county engineer and then stormwater  
21 manager.

22 Q: Okay. Tell me a little bit about the history  
23 of Horry County's involvement in stormwater  
24 management.

25 A: When I started with the County, we didn't have



1 a good stormwater management program. It was  
2 ... the stormwater effort was basically clean  
3 out ditches when, you know, people complained  
4 about things; or replace a broken pipe under  
5 a road. It was basically a public works  
6 function. It was not a committed stormwater  
7 management function. County Council decided  
8 back in 1997 to start work on a better  
9 stormwater management plan for the county  
10 because of all of the flooding problems that  
11 were occurring around the county. So they  
12 created a advisory group. That advisory group  
13 met for over a year and decided that they would  
14 make a recommendation to County Council to  
15 create a stormwater utility, which is a fee-  
16 based system where each property owner  
17 contributes a fee to the stormwater program  
18 based on the amount of impervious area on their  
19 parcel. And that was the beginning of that  
20 effort. Those ordinances creating that utility  
21 were passed in 2000 and that was the impetus  
22 for a dedicated stormwater management program.

23 Q: And are you the staff person responsible for  
24 implementation of that program?

25 A: Yes.

1 Q: All right. And in 2000 when the ordinance was  
2 promulgated, who was the staff person  
3 responsible for implementation of that  
4 program?

5 A: That fell on me also.

6 Q: Okay. As deputy stormwater engineer?

7 A: As deputy county engineer.

8 Q: Okay. How personally familiar are you with the  
9 myriad of drainage structures within the  
10 county?

11 A: As well as anybody can be in an 1,100 square  
12 mile county.

13 Q: Okay. Do you, as part of your duties, actually  
14 go out, identify and inspect drainage  
15 structures?

16 A: Yes, I do. On a regular basis I'm in the  
17 field.

18 Q: Okay. What might bring you in the field?

19 A: Typically, complaints from residents,  
20 businesses. You know, flooded roads can, you  
21 know, take me to the field to investigate what  
22 the problem is and what the possible solutions  
23 might be.

24 Q: Okay. How familiar are you with the Old South  
25 Golf Course and the surrounding development

1 known as Deerfield Plantation?

2 A: I'm very familiar with that area.

3 Q: Okay. And what is your familiarity based on?

4 A: Well, ever since I started with the County,  
5 we've had drainage ... there were always  
6 drainage problems in that area. That was one  
7 of the ... probably one of the primary areas  
8 that flooded on a regular basis.

9 Q: Okay. And what would be your role in  
10 responding to that flooding or the complaints  
11 of flooding?

12 A: Well, when residents would call and file  
13 complaints, we would go and investigate. It  
14 became evident very early on in my stint with  
15 the County that we had a significant problem  
16 there that needed to be solved. And so we  
17 undertook to hire a consultants to conduct a  
18 drainage study of that entire basin.

19 Q: Okay. And I'm going to show you some documents  
20 that are in evidence as Respondent Deertrack's  
21 Exhibits 8, 18, and 26 and ask you if these are  
22 the drainage studies that you just referenced  
23 in your testimony?

24 A: Number 26 was the first study that was done.  
25 The county hired the LPA Group of Columbia to

1           conduct that drainage study for us. The Number  
2           8 was a follow-up report they did at our  
3           request to update the previous study in light  
4           of the fact that there was going to be ... we  
5           knew there was going to be a redevelopment of  
6           the golf course and we wanted to make sure that  
7           the drainage study was updated to reflect the  
8           current conditions in the watershed. Exhibit  
9           18 was a subsequent revision to that in July of  
10          2008 where we asked them to actually take the  
11          drainage design by ETS for their subdivision  
12          and actually include it in the model that LPA  
13          was working on to make sure that, you know,  
14          that it would work properly within the ...  
15          within the constraints and the issues of the  
16          drainage basin as a whole.

17       Q:     Okay. Let me sidetrack a little bit here  
18               because I don't ... I think I forgot to  
19               question you about this. You mentioned that  
20               you're in charge of plan review.

21       A:     Yes.

22       Q:     Okay. Horry County's ordinance requires  
23               developers to come to you just as they go to  
24               OCRM?

25       A:     That's correct.

1 Q: Okay. And what do they provide you to satisfy  
2 your ordinance?

3 A: There's a requirement obviously for detailed  
4 plans and the normal subdivision-type plans,  
5 drainage plans, sediment and erosion control  
6 plans, water and sewer plans, road plans. And  
7 then a detailed stormwater report is necessary  
8 as well.

9 Q: Okay. And what is the regulatory test that  
10 Horry County requires a developer to meet in  
11 order to get stormwater approval?

12 A: We require that the developer or the engineer  
13 design a system that limits the post-  
14 development runoff from 25- year storm event to  
15 the 25 year pre-development runoff rates.

16 Q: Okay. Do you know whether or not Horry  
17 County's ordinance is more restrictive or less  
18 restrictive than state law?

19 A: The state law only requires the developer meet  
20 the pre- and post-development requirements for  
21 ten- year storm.

22 Q: Okay.

23 A: Whereas, we do a 25-year storm, which is a  
24 larger rainfall event. So detention ponds tend  
25 to be larger.

1 Q: Okay. Is that more restrictive?

2 A: That's more restrictive, yeah.

3 Q: All right. Now, is it common for engineers  
4 working for developers to utilize stormwater  
5 models, computer models in their submissions?

6 A: That's pretty much the way we see it now.  
7 Occasionally on a small site we might see some  
8 hand calculations.

9 Q: Okay.

10 A: But almost everybody has gone to computerized  
11 stormwater models.

12 Q: All right. And are you in charge of reviewing  
13 those models?

14 A: I do some of the review, but I also have staff  
15 members who are certified plan reviewers as  
16 well.

17 Q: Okay. Are you a certified plan reviewer?

18 A: No, I'm not. Not right now.

19 Q: Okay. All right. Do you have experience in  
20 reviewing the models?

21 A: Yes. I've been doing drainage designs since I  
22 started work in 1980.

23 Q: All right. And on the part of Horry County,  
24 can you estimate approximately how many  
25 submittals you've reviewed that included

1 computer models?

2 A: Since we implemented our program in 2000, we  
3 have reviewed and approved over 1,500 projects.  
4 And I would estimate probably 90 percent of  
5 them are computerized models.

6 Q: Okay. And you say we. How much experience  
7 have you had looking at the models and ...

8 A: I was the primary reviewer of all the plans  
9 until I added staff members to assist me in  
10 that. So I did it all myself probably until 19  
11 ... I'm sorry, until about 2006.

12 Q: Okay. So are you comfortable looking at a  
13 computer model that's been generated by an  
14 engineer and knowing where to look to find the  
15 information that's important to you?

16 A: Yes, I am.

17 Q: Okay. You have a general understanding of the  
18 inputs that are put into computer models?

19 A: Yes, I do.

20 Q: Okay.

21 A: I understand also the restrictions on the  
22 models, the constraints that the ... and the  
23 limitations of a lot of the computer models  
24 because, you know, computer models are just  
25 that; it's just a mathematical model. It's not

1 real life.

2 Q: Okay. When you're handed a computer model as  
3 part of a submittal, do you know how to  
4 interpret the model data?

5 A: Yes, I do.

6 Q: Okay. Now, let's go back to the LPA studies.  
7 Did you deal directly, you personally deal  
8 directly with LPA?

9 A: Yes. I was the primary contact with LPA.

10 Q: All right. What is it that you told LPA the  
11 County needed?

12 A: Well, when we initially hired LPA back in 2000  
13 to do the report, we explained that, you know,  
14 there were significant flooding problems in  
15 these areas and we wanted them to develop a  
16 computer model of the system and then make  
17 recommendations as to ways the ... efforts the  
18 County could take to reduce the flooding  
19 impacts. When we updated it in 2007, I  
20 explained to them that we had new developments  
21 planned in the Deertrack area and we wanted an  
22 updated model that included changes that have  
23 occurred in that watershed. There's been quite  
24 a few changes since the 2000 report. There  
25 have been new subdivisions added up in the



1 upper reaches of the watershed. So we wanted  
2 that model to be as up-to-date as possible so  
3 that we had a good basis to review the incoming  
4 development plans.

5 Q: Okay. Did you participate in the designation  
6 of the watershed that was modeled in the LPA  
7 report?

8 A: No. The LPA staff members reviewed the  
9 topographic information, came out and did site  
10 visits and surveys. They have their own survey  
11 crews that they brought out. So that was their  
12 effort.

13 Q: Okay. Have you had any opportunity to verify  
14 the boundaries of that watershed to determine  
15 if their effort was correctly accomplished?

16 A: To the best of my knowledge, that watershed  
17 boundary is pretty accurate. I have found that  
18 there was a couple of areas that they included  
19 that did not drain in this direction. And they  
20 wouldn't have known that unless they had been  
21 ... done the actual design. There's a  
22 subdivision called Ashton Glenn that actually I  
23 worked when I was with DDC Engineers before  
24 working at the County, I was the designer on  
25 that. And I know for a fact that subdivision

1 does not drain into this particular watershed  
2 in question, but it, in fact, drains up towards  
3 the Highway 17 Bypass. So, they included some  
4 acreage there that does not drain into this  
5 basin. But then there's also some areas that  
6 we found later from the Deerfield homeowners,  
7 that there's an area up above the clubhouse  
8 that does in fact drain in this direction. LPA  
9 had not included that. So, it's basically a  
10 wash. There's about 40 acres that they've  
11 added in the wrong location, but they missed 38  
12 acres up above the clubhouse.

13 **THE COURT:** Which one of the studies or examinations  
14 are we talking about? The first one or the  
15 last one?

16 **MR. GARIGEN:** They used the same watershed  
17 boundaries in all of them. Yeah.

18 **Q:** Exactly what is the purpose of creating that  
19 watershed boundary?

20 **A:** Well, in order to quantify the runoff for a  
21 drainage area, you've got to have the area.  
22 You have to know what the drainage boundaries  
23 are, the contributing area for the runoff  
24 calculations. So by over, you know, they  
25 included part of a subdivision that didn't

1 actually drain in that direction, they were  
2 overestimating the flows that they'd be  
3 generating; but, of course, they missed another  
4 area nearby. So, it's basically a wash in  
5 terms of the overall area and the impact of  
6 those areas.

7 Q: Okay. What is the ... do you have personal  
8 knowledge as to what was causing flooding in  
9 the Deerfield Plantation at the time that you  
10 were receiving the calls, the flooding calls?

11 A: I guess a combination of things. When the  
12 original Deerfield development occurred, they  
13 didn't ... they weren't the rules and  
14 regulations that we have now. Frankly, the  
15 homes were ... the entire development was built  
16 in a low area. It should have been elevated.  
17 In this day and age, we would have raised the  
18 houses up and the roads up above that. And  
19 then there's also the downstream drainage  
20 system that went underneath the highway was  
21 inadequate.

22 Q: All right. And how do you know that it was  
23 inadequate?

24 A: Because people were flooding.

25 Q: Okay. Were you able to determine that the

1 flooding was a result of downstream conditions?  
2 A: Yes. That became very obvious early on that  
3 that was the problem, and, of course, the  
4 drains into the Town of Surfside. So we're  
5 talking about jurisdictional boundaries here  
6 and political boundaries, and the politics got  
7 into it with the Town of Surfside not wanting  
8 to take any more water, as they put it. So,  
9 you know, the purpose ... also, the purpose of  
10 that original study was to quantify that for  
11 the Town of Surfside so that they could  
12 understand what we were doing.

13 Q: Okay.

14 A: The follow-up construction project took those  
15 issues into account. We actually did many  
16 improvements within the town as part of our  
17 improvement project. To relieve Deerfield, we  
18 had to go into the Town of Surfside and make  
19 improvements there, too.

20 Q: Okay. All right. In the initial ... I think  
21 you might have brought some notes with you. Do  
22 you have those with you?

23 A: Yeah.

24 Q: And are those notes simply notations from  
25 information that was provided in the LPA

1 reports?

2 A: Yeah. These were some notes that I'd done over  
3 ... actually in preparation not for just this,  
4 but for other meetings we've had on this topic.

5 Q: Okay

6 A: Both at the Town of Surfside and the  
7 homeowners' association meetings.

8 Q: Okay. Well, I'm going to ask you if you need  
9 to to refer to your notes. In the original LPA  
10 report, did they provide you an actual water  
11 surface elevation at the outfall that serves  
12 the Deerfield Plantation?

13 A: Yes, they did. Node 27, which was the point  
14 where Deerfield discharges into the main  
15 outfall ditch before it goes out to Highway 17,  
16 the existing conditions report from the 2000  
17 study for a 25-year storm event indicated a  
18 water surface elevation of 2467, 24.67.

19 Q: Okay. And then in the LPA report, did they  
20 propose or model certain ... what did they  
21 model in that initial LPA report?

22 A: In addition to just documenting what the  
23 existing conditions were, they also provided  
24 three alternatives for making improvements in  
25 the drainage basin. And, of course, they

1 provided the entire gamut of calculations for  
2 each of those alternatives ...

3 Q: Okay.

4 A: ... in addition to the existing conditions.

5 Q: Were they able to project in their mathematical  
6 model if you did the identified alternatives  
7 how it would affect the water surface elevation  
8 at the outfall at node 27 in 2000?

9 A: I don't have that note in front of me, but if  
10 I recall, I think if we implemented the  
11 alternatives, we were going to be seeing a  
12 water surface elevation of around 21, if I  
13 recall.

14 Q: Okay. All right. Now, tell me, and we had  
15 some discussion yesterday in the courtroom  
16 about the alternatives identified. Tell me how  
17 Horry County proceeded to implement the  
18 recommendations of LPA in this drainage basin  
19 or in this watershed.

20 A: The three alternatives, Alternative Number 1  
21 was to provide various detention basins or  
22 detention ponds at the various locations  
23 upstream of Highway 17 and a couple of culvert  
24 replacements in Caropines and Glenns Bay Road.  
25 That was the most expensive alternative because

1 it required a lot of land acquisition. So, at  
2 the time, the County decided not to pursue that  
3 alternative. Alternative 2 proposed major pipe  
4 upgrades upstream of Lake Elizabeth which is,  
5 you know, the piping under Highway 17, as well  
6 as improvements in the Town of Surfside to  
7 allow that flow to pass through the town. And  
8 it also called for one acre of additional  
9 detention upstream of Glenns Bay Road.

10 Q: Okay.

11 A: Alternative ... that was \$1.6 million cost  
12 estimate. Alternative 3 was basically the  
13 combination of 1 and 2 with less land  
14 acquisition for the detention ponds. And that  
15 cost estimate was \$7.6 million.

16 Q: Okay. So what did Horry County decide to do?  
17 How did you proceed?

18 A: We implemented Alternative 2 immediately. And  
19 that was the project that occurred in 2001.  
20 Like I said, that involved replacing the pipes  
21 under Highway 17, upgrading those pipes, and  
22 making improvements down in the Town of  
23 Surfside. An additional pipe culvert was put  
24 in under Glenns Bay Road as well.

25 Q: Okay. And since the implementation of

1           Alternative 2, has the County done any more  
2           improvements to the drainage system?

3       A:     Yes.     We also ... a piece of land became  
4           available in a prime location right behind the  
5           bowling alley where that node 27 is and the  
6           County decided to acquire that property and  
7           construct a detention pond there.

8       Q:     Okay.   Anything else?

9       A:     We installed a screening structure to try to  
10          catch the debris before it went into the Town  
11          of Surfside. That's been one of their primary  
12          complaints over the years, is all of the  
13          garbage from Horry County flowing into the Town  
14          of Surfside. So we installed a very expensive  
15          screening system at the headwaters of a dual  
16          culvert system leading out to Highway 17.

17      Q:     Okay.   Was the dual culvert also an improvement  
18          that you added?

19      A:     Yes, because once again, in terms of a lot of  
20          garbage and debris was getting into the  
21          stormwater system from that open ditch that was  
22          adjacent to ae bowling alley.

23      Q:     Okay.

24      A:     So, there was a lot of ... and there was a  
25          shopping center there, so we were getting a lot



1 of windblown debris into that drainage system.  
2 So we decided by covering that up, we would  
3 eliminate a lot of that, you know, detrimental  
4 items getting into the town.

5 Q: To date, what has the County spent on  
6 implementing drainage improvements within this  
7 watershed?

8 A: Overall, we've spent over two million dollars.

9 Q: All right. And presently, do you have plans to  
10 do anything else in terms of improving drainage  
11 in the watershed?

12 A: If we could ... if we could find some  
13 additional land in a good location in that  
14 area, we would probably try to pursue an  
15 additional pond. We actually tried to expand  
16 the detention pond underneath some Santee-  
17 Cooper power lines, but they wouldn't let us do  
18 that, so we got stuck on that one. But we were  
19 trying.

20 Q: And have you kept LPA apprised of the  
21 improvements that you've made?

22 A: Yes. Their latest revision to their stormwater  
23 model included the dual 60-inch pipes and  
24 screening structures and those new changes that  
25 we've implemented, the new pond we dug are all

1 included in that latest report.

2 Q: What was the purpose of obtaining two  
3 additional reports?

4 A: Like I said, the first, the 2007 report was  
5 because we knew that the redevelopment plans  
6 were going to be coming in and we wanted to be  
7 prepared for that with the latest information  
8 so that we could properly review those plans.  
9 I did not want to rely on the ... on an old  
10 report, an outdated report. Because of all the  
11 changes that had occurred in the watershed, I  
12 knew that there were going to be substantial  
13 differences from 2000 to 2007. That was the  
14 purpose of that updated report.

15 Q: Okay.

16 A: And then when we started making additional  
17 changes and digging the additional stormwater  
18 pond and putting in the dual 60-inch pipes, I  
19 wanted to make sure that that was going to work  
20 before we put those pipes in. So they gave us  
21 an update on that and confirmed that putting in  
22 those two 60-inch pipes was not going to  
23 present a problem.

24 Q: Okay. Now, let me ask you this. The 2000  
25 report gave you an actual water surface

1 elevation in excess of 24, I believe was your  
2 testimony. And you recall that they predicted  
3 you could bring it down to 21. Have those  
4 numbers, actual water surface elevation at node  
5 27 and predicted water surface elevation at  
6 node 27, changed or been revised through the  
7 two updated models?

8 A: Yes. Well, we've got two different scenarios.  
9 One would be with the subdivision in place; and  
10 one without the subdivision in place. The 25-  
11 year water surface elevation at node 27 is  
12 basically ... it's basically the same at 20.64.

13 Q: Okay. So how does that compare to the 21 they  
14 predicted?

15 A: We actually, we made ... with the improvements  
16 that we've made, we've accomplished our goal of  
17 reducing those flooding elevations down to  
18 actually below what LPA originally predicted,  
19 we would get the benefit we received back when  
20 they did the first study.

21 Q: We had some testimony yesterday presented by an  
22 engineer, Mr. Steve Powell, relating to his  
23 concerns that the LPA model was not calibrated  
24 or verified. What is your position as the  
25 staff person dealing directly with LPA as to

1 the necessity of calibration and verification  
2 of the model?

3 MR. CHANDLER: Your Honor, she's asking this witness  
4 to give an opinion and she's never disclosed  
5 any indication that this witness was going to  
6 be called as an expert.

7 THE COURT: Sustained.

8 Q: Let me see if I can ask this question a little  
9 bit differently where you're not rendering an  
10 opinion. Did you direct LPA to verify or  
11 calibrate the model?

12 A: No, I didn't specifically direct them to do  
13 that.

14 Q: All right. Have you done anything to verify  
15 the elevations provided to you by LPA?

16 A: We haven't conducted any official calibration  
17 surveys. You know, it's kind of a touchy area  
18 of how you adequately calibrate these models.  
19 I know from my experience with the County and  
20 looking at the site, after various rain events,  
21 being out there on site, knowing what the water  
22 surfaces are doing in various storm events, I'm  
23 fairly comfortable that LPA has done a pretty  
24 decent job in their computer model.

25 Q: What is it that you see on the site during and

1 after storm events and where do you see it that  
2 gives you that comfort level?

3 A: Well, there were a couple ... there's obviously  
4 a number of places where you can look at the  
5 water surface elevations very readily just  
6 driving by even. You can drive down Plantation  
7 Drive in Deerfield where the main crossing is  
8 there, you can compare those elevations. You  
9 can also look behind the bowling alley at node  
10 27 where we dug the new pond. That pond was  
11 really an expansion of existing pitch there  
12 that flowed into a 72-inch pipe with a road  
13 over the top of it. So I could very easily,  
14 you know, drive by on a frequent basis during  
15 storm events and see what elevations we were  
16 seeing and compare that to whether it was a 2-  
17 inch rain or a 4-inch rain or a 6-inch rain,  
18 etcetera.

19 Q: Have you done that?

20 A: Yes. Very often. Very often.

21 Q: Okay. And what have you concluded based on  
22 your visual observation?

23 A: I've concluded that I believe that the LPA  
24 model accurately represents what's actually  
25 occurring in the watershed.

1 Q: At the outfall?

2 A: At the various locations. Both at Glenns Bay  
3 Road, Highway 17, behind the bowling alley and  
4 Plantation Drive.

5 Q: Just bear with me a minute. I've got to run  
6 through my notes real quick. Let me talk to  
7 you about some specific structures that the  
8 County has installed. First of all, let me ask  
9 you this question. Have you received  
10 complaints from residents in Deerfield  
11 Plantation regarding flooding of their garages  
12 or their homes since 2001?

13 A: I don't recall any reports since 2001 of water  
14 actually entering peoples' homes or garages.

15 Q: Okay. Let me show you what's in evidence as  
16 Respondent's Exhibit 27 and ask you if you're  
17 familiar with that photograph and the structure  
18 depicted in that photograph?

19 A: Yes. That's a location where the two 60-inch  
20 pipes that we installed in that open ditch. We  
21 had to construct a ... what we call a conflict  
22 box because we had a conflict with the existing  
23 water and sewer lines in this location. So our  
24 standard engineering practice in that situation  
25 is to provide this large oversize box to

1 accommodate that. It provides a couple of  
2 benefits or purposes. One, is it allows the  
3 utility company, in this case Grand Strand  
4 Water and Sewer Authority, to keep an eye on  
5 that pipe and make sure that we don't ever have  
6 a leakage or a breakage of that line. That's  
7 one benefit of that. And then, of course, the  
8 other thing is that it provides ... water can  
9 flow underneath the interfering utility line,  
10 water can flow underneath it as well as over  
11 the top.

12 Q: Okay. How big is the conflict box?

13 A: The size of a small room. It's probably 12 ...  
14 14 feet long and I'd say about eight feet wide  
15 and seven feet ... seven feet deep.

16 Q: Have you investigated to determine if the two  
17 ... we call these the two 60-inch pipes?

18 A: Right.

19 Q: I had some confusion yesterday. They're not  
20 72-inch; they're 60-inch?

21 A: Sixty inch.

22 Q: Okay. That the two 60-inch pipes are ... that  
23 there's flow going through those pipes? Have  
24 you been able to investigate that?

25 A: Yes, there's flow. They pretty much flow all

1 the time. With our groundwater situation in  
2 Horry County, you've got water in the bottoms  
3 of these ditches almost all the time. So, we  
4 do have flow, continuous flow in this bottom of  
5 this pipe.

6 Q: Okay. I'm going to show you what's been marked  
7 as Respondent's 21A and B and ask you about  
8 this structure. I think you mentioned this was  
9 the screen structure that you put in to address  
10 concerns of the Town of Surfside?

11 A: And I'll take these in order. Twenty-One A ...

12 Q: Why don't you hold that up for the Judge, too.  
13 It's hard to see.

14 A: Yeah. This was the original screen structure.  
15 The large ... a large box, large concrete box  
16 with four metal screens on the front, on the  
17 face of it. We discovered pretty quickly in  
18 the first significant storm event that that  
19 screening structure was screening too well and  
20 capturing too much debris on it and was  
21 actually blocking some of the water flow. So  
22 we had to redesign that to alleviate that  
23 problem. And that's what 21B is, is the  
24 revised screen structure. The benefits to this  
25 are the screens themselves go six inches below



1 the water surface and it's open underneath  
 2 that. Basically, the water can flow up  
 3 underneath the screens. The floating debris is  
 4 captured by the screens, but the bottom is  
 5 open. And then once the water surface in a  
 6 large enough storm event would ever get to the  
 7 tops of the screens, there's a grading system  
 8 in place to act as an overflow as well. And  
 9 then, in the worst case scenario, if the water  
 10 surface ever got to the very top of the box,  
 11 there are four grates on the top as well to  
 12 provide additional overflow.

13 **THE COURT:** Which one of those boxes experienced the  
 14 version of the screen, the crushing of the  
 15 screen? The one I'm looking at or the previous  
 16 one?

17 **MR. GARIGEN:** That was the previous installation.  
 18 That's when we discovered we had a problem and  
 19 we needed to ... and we had a contractor come  
 20 in and revise it to this. And this one does  
 21 seem to be working very well.

22 **Q:** Now, aside from the screening function, what is  
 23 the function of the big concrete box? Is that  
 24 an outfall structure of sorts?

25 **A:** It really was only for the screening.

1 Q: It was?

2 A: Right. We needed to provide enough surface  
3 area on the screens, so, you know, that's why  
4 that box got so big. We wanted to ... we knew  
5 that the screens were at times going to be up  
6 to 50 percent blockage on them, so we wanted to  
7 provide enough surface area to compensate for  
8 that. So that's the purpose of that oversize  
9 box.

10 Q: Okay. I'm sorry, did you ...

11 A: Well, if you didn't put this there, if you  
12 weren't concerned about keeping the debris out  
13 of Surfside, you would just extend those two  
14 60-inch pipes into the pond. You wouldn't need  
15 to go through all that expense.

16 Q: Okay. We have already in evidence something  
17 marked Respondent's Exhibit 28 which is a  
18 drawing that the County prepared and provided  
19 to Mr. Powell. Let's see. I'll also show you  
20 Respondent's Exhibit 9, which is an aerial  
21 photograph. And, unfortunately, we have  
22 nothing that depicts the entire area that  
23 encompasses the improvements, but if you can  
24 orient yourself on Respondent's Exhibit 9, and  
25 you've already enumerated expenditures that the

1 County has made and structures that they've  
2 invested in to address this drainage problem.  
3 If you could kind of indicate to the Judge  
4 where these structures are located, even though  
5 it's probably going to be off of this picture,  
6 and where it starts and where it ends.

7 A: I'm not sure if you can see this. The pond  
8 that we just dug is right ... this is the  
9 bowling alley. It's right behind the bowling  
10 alley. Actually, this photograph shows the  
11 construction equipment out there working on  
12 that. The main channel from Glenns Bay Road is  
13 this ... through this wooded area here.  
14 There's a very small pond behind the Deerfield  
15 homes here. It goes underneath the power  
16 lines. This is the area that we wanted to  
17 expanded; we couldn't do that. This is the new  
18 pond. And then the open ditch that was here  
19 was the one we piped with the two 60-inch  
20 pipes. There's a single 60-inch pipe under the  
21 frontage road, which there's some drainage from  
22 the median that joins that system. And then  
23 the pipe size is jumped up to a 72-inch pipe  
24 down to Lake Elizabeth in the Town of Surfside  
25 just off the picture here.

1 THE COURT: Just out of curiosity, how does ... how  
2 do you get by having one 60-inch pipe to accept  
3 the outfall from two 60-inch pipes?

4 MR. GARIGEN: The main reason for putting in two 60-  
5 inch pipes was so that we didn't lose the  
6 storage capacity of that open ditch. It was a  
7 very large open ditch that provided a lot of  
8 storage, almost like a linear pond. We didn't  
9 want to lose all that by piping it. From a  
10 conveyance standpoint, the single 60-inch pipe  
11 would have worked because that's the limitation  
12 at the frontage road. So we just didn't want  
13 to lose storage so we installed two pipes.

14 Q: Do you remember a rain event in October of  
15 2008?

16 A: Yeah, that was the last significant rain event  
17 we've had in Horry County.

18 Q: All right.

19 A: That was the rain event that caused so many  
20 problems in Charleston, I believe, too.

21 Q: Okay.

22 A: We had, I think, about four inches of rain in  
23 a fairly short period of time.

24 Q: All right.

25 A: And it did cause problems around the county.

1 Q: Did you have the opportunity to inspect or view  
2 the outfall from the Deerfield node 27 after  
3 the rain event or during the rain event?

4 A: Yeah. It was ... actually, the screens  
5 provided evidence of what happened out there.  
6 That was back when the old screens were in  
7 place and the water surface in this pond  
8 basically reached the tops of those screens in  
9 that rain event.

10 Q: All right. And from your perspective as the  
11 Horry County stormwater manager, is that proper  
12 performance of the pond? Is that how it's  
13 supposed to perform or is that a maintenance or  
14 an issue that you need to correct?

15 A: No, I ... I mean, I think that's just an  
16 indication of the amount of rainfall we've had.  
17 Certainly the screens were causing some  
18 blockage at that point. I don't think the  
19 screens were the biggest problem. You know, we  
20 just had a lot of rain in a short period of  
21 time. But, once again, we didn't see any  
22 flooding in Deerfield that would occurred prior  
23 to 2000. You know, they had many ... many  
24 smaller rain events that caused flooding.

25 Q: Prior to 2000?

1 A: Prior to 2000.

2 Q: You're familiar with the Deerfield Plantation  
3 ... I'm sorry, the Deertrack Golf, Inc.  
4 proposed development?

5 A: Yes.

6 Q: You understand that they're here up on an  
7 appeal of their OCRM permit. But aren't they  
8 also seeking a permit from Horry County?

9 A: Yes. They're seeking a permit from Horry  
10 County. Yes.

11 Q: Okay. And how does that permit compare to the  
12 OCRM permit?

13 A: Well, I'm not sure what you mean by compare.

14 Q: Stormwater.

15 A: They need to get both permits in order to  
16 proceed with the project.

17 Q: Okay. What kind of review have you given that  
18 project compared to your typical review of  
19 other projects?

20 A: We've probably ... well, I know we've spent  
21 more time reviewing this project than any  
22 previous subdivision project we've ever  
23 reviewed.

24 Q: Why is that?

25 A: Mainly because of the problems associated with

1 this watershed. There's been a long history of  
2 flooding. We just wanted to be extra careful  
3 that we didn't cause ... the County spent, like  
4 I said, over two million dollars fixing a  
5 problem. I did not want to let a subdivision  
6 come in that was going to wipe away all that  
7 hard work. And so we were being  
8 extraordinarily careful. Obviously, some of  
9 the delays involved, the various timing of the  
10 LPA updates, that kind of delayed their reviews  
11 as well because we were waiting for results  
12 from LPA.

13 Q: Okay.

14 A: But we spent more time, more man hours  
15 reviewing this project than any other.

16 Q: All right. And where are you in that process?

17 A: The County is prepared to issue its stormwater  
18 permit as soon as these issues are resolved.

19 Q: By these issues, you mean the issues before the  
20 Administrative Law Court?

21 A: That's correct.

22 Q: Okay. We've had some discussion about the fact  
23 that ETS was required to submit a number of  
24 revisions to the County. We've had various  
25 numbers discussed, 17 revisions, 19 revisions.

1 Can you describe what kind of thing might  
2 prompt that revision process?

3 A: Well, some of the things that would come up  
4 during this process, you know, somewhat involve  
5 the homeowners' associations and the various  
6 property individuals bringing things to our  
7 attention that we were unaware of; additional  
8 pipes that may be the problem. There was  
9 additional contributing drainage area above the  
10 clubhouse that we were not aware of and ETS was  
11 not aware of when the original design was done.  
12 So when those reports would come in from the  
13 citizens or the residents with knowledge of the  
14 existing system in place, we would take those  
15 things seriously and go look at them. And  
16 sometimes they required a review ... a revision  
17 to the plans to accommodate or take into  
18 account those changes in conditions.

19 Q: Have you attempted to be responsive or  
20 receptive to the citizens during this process?

21 A: Yes. We have a complete open door policy with  
22 the citizens. We let them come in and review  
23 the plans; we've even e-mailed them the  
24 electronic versions of those plans. It's  
25 complete open book for us. Anybody can come



1 and look.

2 Q: And have you, in your review, in your capacity  
3 as Horry County stormwater manager,  
4 understanding that you're not reviewing the  
5 OCRM permit, have you addressed the concerns  
6 the citizens brought you?

7 A: We've addressed all their concerns. I'm not  
8 sure to the full satisfaction of them, but  
9 we've taken into account all of their concerns  
10 and done what we can within the confines of our  
11 ordinance to make those things ... to make them  
12 as happy as we can. But we still have an  
13 ordinance that we have to comply with.

14 Q: I note that the LPA studies reference both  
15 Deertrack and Caropines. What is Caropines?

16 A: Caropines is another older subdivision,  
17 probably constructed around the same time as  
18 the original Deerfield Development was done,  
19 and that's on the other side of Glenns Bay Road  
20 upstream.

21 Q: Okay. And did LPA also make recommendations to  
22 the County about addressing drainage in  
23 Caropines?

24 A: Yes. We made ... the County made improvements  
25 in Caropines as well. Like I said, we put a

1 new pipe under Glenns Bay Road. We did some  
2 other pipe crossing improvements within the  
3 Caropines subdivision; opened up some of the  
4 ditches. And we've seen a decrease in flooding  
5 problems in Caropines as well.

6 Q: Okay.

7 MS. SHAHID: I don't have any other questions for  
8 Mr. Garigen.

9 MR. BARNETT: I don't have any questions, Your  
10 Honor.

11 THE COURT: Mr. Chandler?

12 MR. GARIGEN - CROSS-EXAMINATION BY MR. CHANDLER:

13 Q: Mr. Garigen, you say that you did some  
14 improvements in Caropines, opened up ditches so  
15 that more water could flow down to this area  
16 that goes into the lakes in the Town of  
17 Surfside?

18 A: That's correct.

19 Q: Okay. So it got the water out of their  
20 subdivision and moved it down to this area just  
21 downstream from the Deerfield Plantation Phase  
22 IIB property?

23 A: Yes, we did.

24 Q: Okay. And you put in some pipes that also  
25 allowed more water to be carried down to that

1 area?

2 A: To ... I'm sorry?

3 Q: Did you also put in place some more pipes so  
4 that more water could be carried down to that  
5 area?

6 A: Well, in conjunction with the work in  
7 Caropines, the improvements we wanted to make  
8 for them, we also had to make sure that we  
9 didn't cause a further problem in Deerfield.  
10 And that's why the timing of the projects was  
11 important. We did the downstream work first  
12 before we ever put that new pipe in under  
13 Glenns Bay Road.

14 Q: Okay. And the first time you put in a  
15 screening system, when you had a big storm, it  
16 got blown out?

17 A: It didn't blow out. One of the screens got  
18 bent inwards about three inches.

19 Q: Now, you mentioned that there is a continuous  
20 flow of water from this property whether it's  
21 been raining or not; isn't that right?

22 A: Yeah. We have a lot of normal groundwater  
23 flows that occur. Even during some drought  
24 periods, we still have that. Because we have  
25 such a shallow groundwater table in these areas

1 of sometimes less than two feet, we do see  
2 continuous flow in open ditches that are dug  
3 below the groundwater table.

4 Q: Okay. And, in fact, historically, there's been  
5 flows that have come down this area and through  
6 where these lakes are, there's a little swash  
7 down there and that's been a drainage area  
8 since before there was any development in this  
9 area; isn't that correct?

10 A: Yes. That ... the natural drainage boundaries  
11 from before man was even here always took the  
12 water out to that swash location.

13 Q: Okay. And so there's always a lot of water  
14 there and that's one reason we find Johnston  
15 soils there; isn't that right?

16 A: That's correct.

17 Q: Okay. Now, how much of the last seven years  
18 has Horry County been in a drought condition?

19 A: I don't have the numbers in front of me, but  
20 just, I'd say the last three years.

21 Q: The last three years. Okay. And so do you  
22 know how much the rainfall deficit for the  
23 county has been during that time?

24 A: No, I'm sorry. I don't have those numbers off  
25 the top of my head.

1 Q: Okay. And, but that rainfall deficit has an  
2 impact on what happens to the water when you do  
3 have a big rain, doesn't it?

4 A: Certain soils can actually harden up quite ...  
5 and make them almost impervious when they  
6 experience a lot of drought. A lot of the clay  
7 soils almost turn into, you know, bricks.  
8 Bricks are made from clay. So, you can have a  
9 problem with a prolonged dry period where the  
10 soils actually tighten up so much that the  
11 initial rainfall event can just basically  
12 almost like it's an impervious area, a parking  
13 lot. But once the soil starts to soften up, it  
14 starts to allow the normal percolation.

15 Q: Okay. And when you have drought conditions,  
16 upstream ponds, the level is lower so that  
17 they're able to store more during storms?

18 A: That can occur in some locations. Now, like I  
19 say, with groundwater tables being as high as  
20 they are, the ... if there's nobody taking  
21 water out of a pond, for example, for  
22 irrigation purposes, they tend to be fairly  
23 stable and be controlled by the groundwater  
24 elevations.

25 Q: Okay. Do you know what the elevation is of the

1 roads and houses within this subdivision that's  
2 surrounded by the golf course?

3 A: They're in the neighborhood of around 20 to 22,  
4 23, especially the lowest areas, this Circle  
5 Drive. This area right in here is the lowest  
6 area (indicating).

7 Q: Okay. And so this updated model that you  
8 mentioned, you've got an elevation of 20.64  
9 downstream from them?

10 A: Yeah, that's correct.

11 Q: Okay. And so the water elevation upstream from  
12 that is going to be higher?

13 A: Yeah, it's going to be somewhat higher.

14 Q: Okay. How high?

15 A: We'd have to actually pull the reports out and  
16 find a specific node location and look that up.

17 Q: Okay.

18 A: We could do that.

19 Q: The ponds that are proposed by Deertrack Golf,  
20 some of them are in the range of 22, even 23  
21 feet, and at some peak stages, as high as 25  
22 feet; isn't that correct?

23 A: Yeah. And those higher ones, of course, would  
24 be where the ground is higher in the upper  
25 parts of the subdivision. Back here, back in

1           this area back behind these condos here, the  
2           ground is quite a bit higher back here so you  
3           would expect to see ponds constructed there to  
4           be at a higher elevation than the ones down in  
5           the lower parts (indicating).

6       Q:    Okay. And, in fact, just about everything that  
7           is proposed to be constructed within the  
8           boundaries of this old golf course is going to  
9           be at a higher elevation than the houses that  
10          are in the middle of it; isn't that right?

11     A:    That's what the design calls for right now.  
12           Yeah.

13     Q:    Okay. And so if we do have a flood event,  
14           there's a pretty good chance that we know that  
15           that water is going to find the low area to  
16           flow to?

17     A:    Yeah. The houses that have flooded in the  
18           past, if they haven't been raised since then,  
19           which I know they haven't, if you get an  
20           extreme event, those are still going to be the  
21           properties that are going to be subject to  
22           flooding.

23     Q:    Okay. Now, all of the recommendations that  
24           were made by the LPA Group study back in the  
25           year 2000; they anticipated this golf course

1 remaining as a golf course, didn't they?

2 A: Yeah, that was the assumption that they made  
3 when they did that report.

4 Q: Okay. And so, I mean, ultimately through this  
5 drainage system, we've still got at least one  
6 area where there's a single 60-inch pipe?

7 A: That's correct. Underneath the frontage road.

8 Q: Okay. And you talked about jurisdictional and  
9 political factors that have come into account.  
10 And basically, the Town of Surfside doesn't  
11 want a whole lot more water coming down into  
12 those lakes; isn't that true?

13 A: That's correct. They've made that very clear.

14 Q: Do you have any actual rainfall data from the  
15 Deerfield/Surfside area for that rainfall in  
16 October 2008?

17 A: No. Unfortunately, I didn't bring that with  
18 me. We do have the records from the rain  
19 gauges at the Myrtle Beach Airport, the Air  
20 Base. There's also some other rain gauges  
21 around, but I didn't ... I didn't bring that  
22 with me unfortunately.

23 Q: And but that rain had the ... you say the water  
24 was up to the top of that structure that we  
25 looked at the pictures?



1 A: That's correct. That would be put at  
2 approximately elevation 20.

3 Q: Okay. And that wasn't even a two-year storm  
4 event, was it?

5 A: It all depends on the duration of the storm,  
6 and that's the tricky part about these rainfall  
7 storm ... calling something a 25-year storm or  
8 two-year storm, it all depends on the amount of  
9 rain and the duration. You can have a 25-year  
10 storm if you have sufficient rain in just an  
11 hour's period. So, it's all about the  
12 duration. And, if I recall, that was ... that  
13 October storm was so bad because it occurred  
14 ... it was thunderstorm related and those  
15 happen very quickly. It was probably a storm  
16 that generated those four inches in an hour or  
17 two.

18 Q: Okay.

19 A: And that's why it was so ... caused the  
20 flooding that it did.

21 Q: And the nature of thunderstorms in the coastal  
22 areas is such that some areas may experience  
23 very intense rain where areas within a half  
24 mile don't experience any rain at all; isn't  
25 that right?

1 A: That's correct.

2 Q: So you wouldn't find it unusual that I left my  
3 home one day last October with my daughter to  
4 go to softball practice at Huckabee Park in  
5 Surfside and it was pouring down rain at  
6 Pawleys Island and we thought we were on a  
7 futile mission and we got to Surfside and it  
8 was not raining at all. It's not unusual at  
9 all on the coast, is it?

10 A: No, it's not.

11 Q: Thank you. That's all I've got.

12 THE COURT: I have one question.

13 MR. GARIGEN: Yes, Judge.

14 THE COURT: You're telling me that you can have a  
15 lot of rain in a short period of time that will  
16 result in a 25-year flood, that if it had been  
17 spread out over a longer period of time it  
18 might not have been?

19 A: That's correct. That's correct. I've actually  
20 got a chart with me if you want me to get it  
21 from my notebook that actually gives the  
22 various durations and rainfall amounts and  
23 tells you what level storm it is.

24 THE COURT: I was just curious if there was such a  
25 chart.

1 MR. GARIGEN: Yes.

2 THE COURT: I don't have to see it. That's  
3 interesting. Thank you. Redirect?

4 MR. GARIGEN - REDIRECT EXAMINATION BY MS. SHAHID:

5 Q: What did you inspect after that October 25th  
6 rain event in 2008?

7 A: Well, the main thing we were looking at was the  
8 screen. We were, you know, I was trying to  
9 figure out what the water surface elevation got  
10 to with its peak. And you could see that right  
11 on the screen itself where the level of the  
12 debris reached. And, of course, we were  
13 concerned about the condition of the screens  
14 themselves because one of them was, had bowed  
15 in.

16 Q: And so you made a conclusion regarding the  
17 water surface elevation based on a watermark or  
18 a mark?

19 A: That's correct.

20 Q: And what was that elevation that you saw?

21 A: The tops of the screens at that time were just  
22 about elevation 20.

23 Q: And based on your knowledge of the dimensions  
24 of that pond and the capacity of that pond,  
25 what did you conclude about the amount of water

1           that entered that pond to reach that elevation?

2   A:   Well, I knew that it was a pretty serious storm  
3       if it got that high that quickly.

4   Q:   Okay.   But when you say that high, that high  
5       from what?   What would the ...

6   A:   The normal pool elevation in that pond is at 15  
7       and a half.

8   Q:   Okay.

9   **THE COURT:**   What pond are we talking about; the new  
10       pond?

11   **MR. GARIGEN:**   Yeah.

12   **THE COURT:**   I understand.

13   Q:   Okay.   And that was following the October 25th  
14       rain event?

15   A:   Yes, that's correct.

16   Q:   All right.   Where does that water come from?

17   A:   The entire watershed that we were discussing  
18       earlier that starts up at South Bay Lakes,  
19       which is almost up to Highway 17 Bypass,  
20       includes Harbor Village, Mallard Landing,  
21       Caropines subdivisions, some older subdivision  
22       areas, and of course, the Deerfield area.

23   Q:   Okay.   So that 1,100 acre, 1,100 plus or minus  
24       acre watershed that LPA identified?

25   A:   Yeah.   The 1,100 acres is the acreage all the

1 way out to the discharge point at the ocean.

2 Q: Okay. You said that in an extreme event,  
3 properties that have flooded in the past will  
4 flood. What is your definition of an extreme  
5 event?

6 A: More than a 25-year storm.

7 Q: All right. Does your ordinance, does Horry  
8 County's ordinance require that Bill Clark  
9 Homes eliminate flooding in the adjacent  
10 subdivision?

11 A: No, that's not in our ordinance.

12 MS. SHAHID: No further questions.

13 MR. BARNETT: No questions.

14 THE COURT: Mr. Chandler?

15 MR. GARIGEN - RECROSS-EXAMINATION BY MR. CHANDLER:

16 Q: When plans are submitted and a 25-year storm is  
17 modeled or a 10-year storm or a two-year storm,  
18 what you do is you basically assume that that  
19 rainfall falls in a certain pattern and you can  
20 graph it as a bell curve.

21 A: That's correct.

22 Q: So that over a 24-hour period, you start out  
23 with a little bit of rain, and it begins and it  
24 peaks, and then it goes down.

25 A: That's correct.

1 Q: And so when you model even a 25-year storm, you  
2 assume that you're going to have a perfect bell  
3 curve storm.

4 A: That's correct. And that's probably one of the  
5 biggest problems with the whole idea of  
6 modeling stormwater. You're trying to  
7 replicate what's occurring in nature with a  
8 mathematical model, and they don't always mesh  
9 very well.

10 Q: Okay. And, in fact, sometimes you can have far  
11 less than a 25-year storm, but it comes in a  
12 burst so that it doesn't look like a bell curve  
13 at all and can cause way more calamity than a  
14 25-year storm that followed that perfect bell  
15 curve; isn't that true?

16 A: That's correct. Most storms do not follow that  
17 bell curve pattern.

18 Q: Thank you.

19 THE COURT: Anything?

20 MS. SHAHID: Your Honor, I would like to offer  
21 Exhibit 9 into evidence. And, for purposes of  
22 your record, I have smaller copies of it.  
23 Exhibit 9 being the large aerial photograph.

24 THE COURT: Any objection, Mr. Chandler?

25 MR. CHANDLER: Which one is 9?

1 MS. SHAHID: The large aerial photo.

2 MR. CHANDLER: No objection.

3 THE COURT: Number 9 is admitted without objection.

4 Respondent.

5 (Respondent Deertrack Golf's Exhibit Number 9 was  
6 admitted into evidence.)

7 MS. SHAHID: Your Honor, Mr. Garigen needs to leave.

8 I would ask that he be allowed to be excused.

9 THE COURT: Any objection, Mr. Chandler?

10 MR. CHANDLER: No objection.

11 THE COURT: Any objection from the others?

12 MS. DIECK: No objection.

13 THE COURT: Thank you, sir.

14 MS. SHAHID: Your Honor, I need a couple minutes to  
15 organize my exhibits for this next witness if  
16 that's all right.

17 THE COURT: That's fine.

18 MS. SHAHID: I don't necessarily need a break, but I  
19 just ...

20 THE COURT: Fine. Just take a couple minutes.

21 MS. SHAHID: Your Honor, just about one more minute  
22 and then I'll be done. Judge, I apologize. It  
23 was just not ... I was not able to take  
24 everything back and forth to the hotel because  
25 we were walking.

1 THE COURT: I understand.

2 MS. SHAHID: So I'm dependent on getting here in the  
3 morning and trying to get it together. Your  
4 Honor, at this time, I would call Thomas  
5 Bevins.

6 THOMAS BEVINS, P.E., having been duly sworn,  
7 testifies as follows:

8 MR. BEVINS - DIRECT EXAMINATION BY MS. SHAHID:

9 Q: Mr. Bevins, if you would, tell the Court where  
10 you're from.

11 A: From Pawleys Island, South Carolina.

12 Q: Okay. And where are you employed?

13 A: I'm employed with a civil engineering firm in  
14 Pawleys Island called Engineering and Technical  
15 Services.

16 Q: Okay. Is that also referred to in this hearing  
17 as ETS?

18 A: It's also known as ETS.

19 Q: And what is your position at ETS?

20 A: I'm the manager of the engineering department.

21 Q: Okay. How long have you been manager of the  
22 engineering department at ETS?

23 A: For about ten years.

24 Q: Okay. Before we explore your professional  
25 background, where did you graduate from



1 college?

2 A: I graduated in 1983 from West Virginia  
3 University.

4 Q: All right. What degree do you hold?

5 A: I have a bachelor of science in civil  
6 engineering.

7 Q: Do you currently hold any professional licenses  
8 or certifications?

9 A: I'm licensed as a professional engineer in the  
10 State of South Carolina and the State of North  
11 Carolina.

12 Q: Okay. And how do you classify yourself? What  
13 field of engineering?

14 A: I practice primarily in the field of stormwater  
15 and water and sewer, and those are the areas  
16 our firm practices in, as well as land  
17 surveying.

18 Q: Is that what I understand to be a civil  
19 engineer?

20 A: That's correct.

21 Q: All right. You've been manager of the  
22 engineering department at ETS for ten years.  
23 How long have you worked at ETS?

24 A: I've been with ETS since 1986.

25 Q: How long have you been a PE?

1 A: I got my license in South Carolina in 1991.  
2 And I've been registered in North Carolina for  
3 about two years.

4 Q: Okay. And, I'm sorry, how long have you been  
5 at ETS?

6 A: I've been at ETS for about 23 years.

7 Q: Where did you work before ETS?

8 A: I worked for about two years in a ... as a  
9 environmental engineer for a small coal company  
10 in West Virginia, which is where I'm from  
11 originally.

12 Q: And you said 23 years at ETS?

13 A: That's correct.

14 Q: In those 23 years at ETS, is there a specific  
15 sort of geographic area that your clients came  
16 from or that your projects were located in?

17 A: Yes. I have practiced mostly in Horry and  
18 Georgetown counties. I've had a few projects  
19 outside of that area, but that's where most of  
20 our work comes from.

21 Q: And what is the major portion of your work as  
22 a civil engineer? What group do your clients  
23 fall into, largest group of your clients?

24 A: Our clients are mostly private developers and  
25 they have projects that are residential

1 subdivisions, either single family lots or some  
2 sort of multi-family type product or commercial  
3 sites like malls or commercial strip malls. We  
4 have a client that's a hospital. That kind of  
5 development.

6 Q: What kind of work do you do for those clients?

7 A: The typical thing is the design of the  
8 stormwater management systems, the domestic  
9 water distribution systems, the sanitary sewer  
10 collection systems. That sort of work.

11 Q: Okay. Are you familiar with state and local  
12 requirements related to stormwater management?

13 A: Yes, I am.

14 Q: All right.

15 A: We work in a variety of different jurisdictions  
16 in those two counties, and we're familiar with  
17 the regulations for the agencies that we submit  
18 our plans to.

19 Q: All right. And have you been in charge of  
20 shepherding plans through the permitting  
21 process, both at a state and local level?

22 A: Yes, I am.

23 Q: Is that the typical role of the project  
24 engineer?

25 A: That's very typical.

1 Q: All right. Have you had any experience in golf  
2 course design?

3 A: Yes, I have. I've qualified as the civil  
4 engineering aspect of the golf course design.  
5 We don't actually do the creative design of a  
6 golf course, but we have worked ... I have been  
7 involved and have worked on eight or nine golf  
8 courses on the Grand Strand in my time working  
9 at ETS.

10 Q: Okay. What type of work were you doing for the  
11 golf course?

12 A: We would take the plan from the golf course  
13 designer and determine how it should be drained  
14 and design the stormwater drainage system and  
15 submit it to the appropriate agencies for  
16 permitting and obtain those permits for the  
17 client.

18 Q: Okay. And have you ever been ... other than  
19 Deertrack Golf, Inc. and their proposal, Bill  
20 Clark Homes' proposal to redevelop the Old  
21 South Course, have you had any experience in  
22 the redevelopment of golf courses?

23 A: Yes, I have.

24 Q: All right. What is that experience?

25 A: There was a property at the Myrtle Trace

1 development in Horry County where a existing  
2 golf course with a nine-hole section of a  
3 course that was converted into residential  
4 housing. And we did the engineering for that  
5 client.

6 Q: Okay. And by engineering, did that include the  
7 stormwater management?

8 A: The stormwater management system design, the  
9 sanitary sewer system, the domestic water  
10 system, the design of the roads. We did the  
11 design work and the permitting work. It went  
12 through Horry County, Horry County Planning,  
13 Horry County Engineering and Stormwater, the  
14 OCRM. Those agencies reviewed our plans and  
15 issued permits and that project was constructed  
16 and it is operational at this time and I think  
17 they're selling homes there now.

18 Q: Okay. And in your 23 years with ETS, can you  
19 approximate for me how many projects you've  
20 been involved with that are development  
21 projects wherein you did the civil engineering  
22 work that you've stated, the design, the water  
23 and sewer, the subdivision and the stormwater?

24 A: I've been involved in hundreds of projects  
25 where I've done those types of design functions

1           that I described. I would say over 600.

2       Q:     Okay.     And the 600 projects that you've  
3           mentioned, did that include obtaining state  
4           and/or local stormwater approvals?

5       A:     Well, I would say it varies on the projects  
6           but, in general, we would acquire both the  
7           state permits and the local permits.

8       Q:     In order to do that, would you do a stormwater  
9           management plan?

10      A:     That's correct.

11      Q:     And did you incorporate stormwater structures  
12           into the development, the design and  
13           development?

14      A:     Typically we would do something exactly like  
15           you're describing.

16      Q:     Okay.     And would you use computer models in  
17           order to aid you in your design?

18      A:     Yes, that's correct. I and other members of my  
19           firm are experienced with various different  
20           computer programs that assist us in the type of  
21           design work that we do, such as stormwater ...  
22           the design of stormwater systems; design of  
23           water distribution/pressure piping systems; the  
24           design of wastewater pumping systems. That  
25           sort of thing.

1 Q: Okay.

2 MS. SHAHID: And, Your Honor, at this time I would  
3 offer Mr. Bevins as an expert witness in the  
4 field of civil engineering which includes  
5 expertise in stormwater management.

6 MR. CHANDLER: No objection.

7 THE COURT: Without objection, Mr. Bevins is so  
8 qualified.

9 Q: Mr. Bevins, based on your experience in  
10 designing golf courses, can you explain to me  
11 the typical functions of the golf course ponds?

12 A: In my experience, typically a developer would  
13 come forward with a design that would include  
14 a residential subdivision with a golf course  
15 surrounding the proposed lots and other  
16 residential areas, perhaps multi-family;  
17 perhaps a clubhouse; cart storage facilities  
18 and golf maintenance facilities. Not unlike  
19 what is at the Deerfield Plantation project.  
20 They generally engage a professional known as  
21 a land planner who decides where all the land  
22 use functions are to be placed on a piece of  
23 property. They provide that sort of a document  
24 to us and we examine it and determine where the  
25 stormwater structures should be placed in the

1 project. And the typical approach is to have a  
2 stormwater system that serves both the  
3 residential elements as well as the golf course  
4 simultaneously, and the system is intricate and  
5 the system is integrated into both the  
6 residential portion and the golf portion  
7 simultaneously. And those residential areas  
8 and golf areas are typically adjacent to each  
9 other and interconnected.

10 Q: What you just described to the Judge, is that  
11 consistent with what was presented to you with  
12 the redevelopment of the Old South Course and  
13 the existing neighborhoods?

14 A: In a way it was. Although the Bill Clark  
15 Homes' property included only the golf course  
16 areas. As a result of the review by Horry  
17 County Engineering and Stormwater Departments,  
18 we were directed to treat it as much like we  
19 were developing both the existing areas as well  
20 as the proposed areas where the golf course  
21 was, in that we had to receive a stormwater  
22 from the existing residential areas and route  
23 it into our stormwater system and account for  
24 their stormwater as well as our own. It was  
25 not a typical project as I've described where



1 we start out with a undeveloped piece of land  
2 and proceeded to develop both the golf course  
3 development and the residential portion from  
4 the beginning.

5 Q: Okay.

6 A: As you know, part of this ... well, the golf  
7 course already existed and so did the  
8 residential, existing residential.

9 Q: Okay. Based on your design of golf courses,  
10 what is the typical function of ponds, like  
11 those depicted on Exhibit 9, on the South  
12 course, function or functions of these ponds,  
13 and why are the ponds necessary for the golf  
14 course?

15 A: Typically, a developer of a golf course would  
16 have a motivation to install a stormwater  
17 drainage system on their golf course for the  
18 purpose of controlling surface water from  
19 rainfall. They have a motivation to have golf  
20 play resume as soon as possible after a  
21 rainfall event, frankly, because they ... it is  
22 a business and the downtime they have during a  
23 rainfall means that they are unable to sell  
24 green fees. So, a golf course operator would  
25 want to have a stormwater ... an efficient

1 stormwater system on their golf course to  
2 efficiently drain the stormwater off the course  
3 and get the course to dry out so that play can  
4 resume as soon as possible. If it is a  
5 development that has both residential function  
6 as well as a golf course, the lakes also  
7 provide an amenity and lots can be placed  
8 adjacent to lakes and golf fairways and they're  
9 probably considered an amenity lot. And  
10 although I don't get involved in the actual  
11 design, the creative design of the golf course  
12 itself for golf play, I believe that the golf  
13 designers incorporate the lakes on the fairways  
14 as a feature of the golf play. It's typically  
15 referred to as a water hazard that puts a  
16 challenge to the play of golf. So you have a  
17 set of stormwater ponds that provide both a  
18 stormwater collection and control function;  
19 they're an amenity and aesthetic feature; and,  
20 in many cases, the lakes are arranged so that  
21 they're interconnected and collect the water,  
22 and at a particular lake, if can be arranged  
23 that an irrigation pump system can be installed  
24 so that you can collect your surface water and  
25 efficiently pump it back and spray it on the

1 golf course to water the grass.

2 Q: Mr. Bevins, at some point during these  
3 proceedings, I asked you review some historical  
4 aerial photography and determine approximately  
5 the period of time within which this golf  
6 course was constructed. And I'm showing you an  
7 affidavit that was filed last fall in support  
8 of motions made by Respondents to refresh your  
9 memory. And I'm going to show you the  
10 photographs that you've reviewed. And do you  
11 recall reviewing various historic photographs  
12 for me?

13 A: Yes, I do.

14 Q: Okay. And can you identify what the  
15 photographs are?

16 A: This large one is a blueprint copy of the early  
17 Horry County tax maps, which they no longer  
18 use, but they were ... originally, the tax maps  
19 were placed on top of a set of aerial  
20 photography.

21 Q: Okay. Is there a date that you can tie to this  
22 large one? I submit to you there's also  
23 something behind it.

24 A: This second one has a date of March 1982.

25 Q: Okay. And what is this second one from?

1 A: I believe that this one came from the OCRM.

2 Q: Okay. And they're photographs?

3 A: Yeah. I think they maintain a series of sets  
4 of photography in their files, and I believe  
5 that these came from their office in Myrtle  
6 Beach.

7 Q: Okay. And is the course evident on the second  
8 photograph ...

9 A: Yes, it is.

10 Q: ... that's dated in 1982?

11 A: I can clearly see the course laid out in the  
12 ... within the project area.

13 Q: Okay. And, based on that, did you conclude the  
14 approximate time frame for when the course was  
15 built? You can refer to your affidavit to  
16 refresh your memory if you need to.

17 A: Yes. We, at your request, gathered some  
18 photographs and we concluded that the  
19 construction of the golf course was complete by  
20 1982.

21 Q: Okay. Let's get these out of the way. How do  
22 you begin the process of performing all the  
23 civil engineering functions, including  
24 designing the stormwater management plan, for a  
25 project generally?

1 A: Well, for a typical project, a client like I  
2 mentioned before might have a land planner lay  
3 out a sketch plan of a development showing  
4 where all the elements of the project are  
5 located and provide that to our firm. And we  
6 would study that and make an engineering  
7 judgment about where the different elements of  
8 design should be placed such as stormwater  
9 systems, the roads, the drainage system, the  
10 water and sewer systems. And we would make, we  
11 would creatively proceed to design those items  
12 and prepare construction plans; submit them to  
13 the various agencies for review and comment and  
14 respond to those comments, and then proceed to  
15 obtain the permits necessary to construct those  
16 items.

17 Q: How do you get to the point in your procedure  
18 of actually doing a stormwater management  
19 design? What brings you to that point in the  
20 process?

21 A: At some point early in the process, field  
22 topographic surveys and field boundary surveys  
23 are conducted by field surveyors. They locate  
24 the physical features of the subject property  
25 and map the topography. And we use that type

1 of mapping information to understand the  
2 property and determine where and how we would  
3 design those features such as the water system,  
4 sewer system, stormwater system.

5 Q: Okay.

6 THE COURT: Ms. Shahid, let's take about a ten-  
7 minute break. It's 11:00.

8 (Break from 11:00 a.m. until 11:15 a.m.)

9 THE COURT: Proceed with your direct examination of  
10 Mr. Bevins, Ms. Shahid.

11 Q: Mr. Bevins, before we took a break, I was  
12 asking you how you get to the point of  
13 stormwater design generally.

14 A: Uh-huh (affirmative response).

15 Q: Let me ask you more specifically. When you're  
16 handed a project like the Old South Course  
17 project, the redevelopment of the Old South  
18 Course, a project that has known drainage  
19 limitations, is there anything different that  
20 you might do to get to the point of modeling  
21 the stormwater and applying for your stormwater  
22 permits? Is your process any different?

23 A: Slightly. As I was describing before, we would  
24 perform land ... field land surveys of the  
25 subject property. We would perform a boundary

1 survey, a topographic survey, locate the  
2 existing features. In this case, there's  
3 existing roads, the golf course has existing  
4 stormwater ponds and pipes and ditches; there  
5 are existing utilities that we'll be tying  
6 into. And we would perform surveys of all of  
7 these features, combine that with the proposed  
8 land use plan, and then start to examine all of  
9 that together and make decisions about where to  
10 place the stormwater features. We would  
11 develop usually a conceptual master stormwater  
12 plan to determine the general patterns of  
13 drainage. Usually we would discuss those with,  
14 in this case, the Horry County stormwater  
15 staff, and try to obtain information that they  
16 would have that might already exist that would  
17 assist us in knowing more about the existing  
18 drainage in the area. And we'd take all those  
19 things into account and then start to do our  
20 design work.

21 Q: Okay. And in this particular instance, what  
22 information did you get from Horry County?

23 A: Well, they provided us with information that  
24 they had accumulated on the overall watershed  
25 that our project lies within. And they also

1 had knowledge about the history of drainage  
2 problems in the area. And they were determined  
3 that the design of this project and their  
4 review of it would encompass and incorporate  
5 not exacerbating the existing problems and  
6 trying to also improve the conditions as a  
7 result of the installation of our project.

8 Q: So your testimony is Horry County asked that  
9 you seek to improve the conditions for  
10 surrounding property owners?

11 A: That's correct.

12 Q: All right. Did you incorporate that request in  
13 your subsequent stormwater management designs  
14 and model?

15 A: Yes, we did.

16 Q: Okay. I'm going to show you what's been marked  
17 as Exhibit 31 and ask if you recognize Exhibit  
18 31?

19 A: Yes. This is a drainage report containing our  
20 stormwater calculations. And this report has  
21 been submitted to OCRM and has been approved by  
22 OCRM.

23 Q: Okay. Now, is this the only drainage report  
24 that you've had to prepare for this project?

25 A: No, it isn't.



1 Q: Okay. You prepared another drainage report for  
2 this project?

3 A: That's correct.

4 Q: And what report would that be?

5 A: Well, it's really the same report, but it has  
6 been revised. And that would have been in  
7 response to additional comments from Horry  
8 County's engineering and stormwater staff.

9 Q: Okay. So it's a separate report for Horry  
10 County?

11 A: Well, it's a separate document but,  
12 essentially, it's the same document having been  
13 subject to additional comments by the Horry  
14 County staff and our responses to them caused  
15 us to make revisions. And I believe that the  
16 cover of it indicates that it's the same title;  
17 it simply has a different revision date.

18 Q: Okay. And the Horry County document, did you  
19 model twice or did you just use ... copy the  
20 model results twice and put them in both  
21 documents?

22 A: It's the same model and we've simply  
23 incorporated additional information that they  
24 provided to us. The report also contains some  
25 pipe sizing calculations that we normally

1 submit to them under separate cover. They  
2 wanted that included in the report. I can't  
3 recall every comment that they made, but they  
4 had a series of, as I believe that you heard  
5 Mr. Garigen mention in his testimony earlier,  
6 they made a series of many sets of review  
7 comments that we were required to respond to.  
8 Some of those comments apply to our plans; some  
9 of them apply to the stormwater calculations.  
10 And the ... I believe that you also heard him  
11 say that he was prepared to issue an approval  
12 and it is as a result of the changes that we  
13 made both to our report and our plans that he's  
14 talking about when he says that they completed  
15 their review.

16 Q: Okay. If I could just sort of characterize  
17 your testimony. Are you saying that there's  
18 stuff in the Horry County report that Horry  
19 County wants that OCRM may not necessarily  
20 require or need to see?

21 A: Essentially that's correct.

22 Q: Okay.

23 MS. SHAHID: And, at this time, Your Honor, I would  
24 offer Exhibit ...

25 A: I don't ... I'm not saying that they conflict.

1 I'm just saying that Horry County has continued  
2 because, I believe, of their closer  
3 relationship with the ... with that particular  
4 area, they just continued to make comments. I  
5 think Tom Garigen explained why they did that.

6 Q: Okay.

7 A: But I don't think there's anything that Horry  
8 County has said or asked for that conflicts  
9 with any of the OCRM requirements.

10 Q: All right. And, Mr. Garigen, Exhibit 31, is  
11 this the drainage report that was submitted to  
12 OCRM?

13 THE COURT: Not Mr. Garigen.

14 Q: Mr. Bevins. Exhibit 31, is that the drainage  
15 report?

16 A: Yes. That's correct.

17 MS. SHAHID: Your Honor, at this time, I would offer  
18 Exhibit 31 into evidence.

19 MR. CHANDLER: No objection.

20 THE COURT: Without objection, Respondent's 31  
21 admitted into evidence.

22 (Respondent Deertrack Golf's Exhibit Number 31 was  
23 admitted into evidence.)

24 Q: And I'm going to stand here beside you for a  
25 few minutes just to direct you to certain pages

1           that have tabs on them. We had a lot of  
2           discussion yesterday about watershed. Does  
3           Exhibit 31 behind the second tab that I have  
4           marked indicate a reference to a watershed?

5       A:   That is a figure that we included in this  
6           report that is the watershed depicted from the  
7           LPA report for the outfall to the Lake  
8           Elizabeth and Lake Dogwood drainage watershed.

9       Q:   And is there an acreage amount shown on that  
10          reference page inside your Exhibit 31?

11      A:   Yes, there is.

12      Q:   And what's that acreage amount?

13      A:   It's 1,115 acres total.

14      Q:   And I'm trying to give Mr. Chandler a reference  
15          point. It's behind appendix A and it is Figure  
16          7.1, correct?

17      A:   That's correct.

18      Q:   Okay. Now, were you focused on watershed or  
19          were you focused on some other type of boundary  
20          area?

21      A:   Well, our report actually studies a subset of  
22          the total watershed that I just described.

23      Q:   Okay.

24      A:   The Deerfield project is within that watershed.  
25          And our model does not address the total

1 watershed. It only addresses the portion of  
2 the watershed that drains through the Deerfield  
3 property and exits the area that we have been  
4 describing as the new pond, or it's actually  
5 referred to in the LPA report as node 27. It's  
6 the tie-in point where Deerfield's drainage  
7 leaves the Deerfield property and enters the  
8 receiving water body. And we derived  
9 information from the LPA report about the  
10 condition at that location. And we are only  
11 showing that watershed in our report as a  
12 reference. And we're not saying that we're  
13 studying that. We have another document, which  
14 you have turned to now which is actually Figure  
15 6.1 ....

16 Q: Behind that Appendix A to Exhibit 31.

17 A: ... which depicts the drainage basin that is  
18 being studied in our calculations, in our  
19 model.

20 Q: Now, why do you select a drainage basin to  
21 begin your modeling in your calculations?

22 A: That is the area that contributes the  
23 stormwater flow to our project and all of our  
24 ... in some fashion, the stormwater structures  
25 in our development are subject only to the

1 drainage areas depicted in this figure.

2 Q: Figure 6.1?

3 A: That's correct ... well, actually 6.1 is the  
4 pre-development condition and Figure 6.3 is,  
5 excuse me. 6.1 is the pre-development and 6.2  
6 is the post-development, but they are the same  
7 total area. It's just that the post-  
8 development basins are representing the  
9 condition of the property after the development  
10 of the new subdivision.

11 Q: How did you determine the boundaries of the  
12 drainage basin that resulted in inputs into  
13 your model?

14 A: In this ... as is typical in this case, we  
15 would have used some of the information that I  
16 described before, the topographic surveys, the  
17 boundary surveys. We also examined other  
18 information that's available such as US ... the  
19 quadrangle ... USGS quadrangle maps for the  
20 area, aerial photographs ...

21 **THE COURT:** USGS quadrangle meaning topographic maps?

22 **MR. BEVINS:** That's correct. They're maintained by  
23 the government and are readily available, and  
24 we use them frequently, and I believe there's  
25 a portion of one in this report as a figure, as

1 a location map. But they have information on  
2 them that is related to the topography of a  
3 larger area around these projects and, along  
4 with aerial photographs, other information.  
5 The County has a very impressive GIS, which is  
6 Geographic Information System, which is  
7 basically a mapping of the entire county. We  
8 use those documents. And also field visits.  
9 I believe that my staff has met with members of  
10 the Horry County engineering and stormwater  
11 department and walked most of these areas  
12 depicted in this drainage basin exhibit to  
13 observe on the ground the condition at the  
14 perimeter of this basin to determine where the  
15 drainage is going. And I think they also have  
16 spoken to some of the people that live in the  
17 Deerfield project. But, as a result of all  
18 those things taken together and our judgment,  
19 this basin area was established.

20 Q: Can you indicate on Exhibit 9, and I know that  
21 you won't be able to get a complete pictures  
22 but, for the Judge's purpose, the boundaries of  
23 the drainage basin as they're shown on Exhibit  
24 9, the aerial photograph?

25 THE COURT: On Exhibit 9, that's fine. Let's look

1 at that. That's not 9 before us, is it?

2 MR. BEVINS: This, I believe, is marked as 9, Your  
3 Honor.

4 THE COURT: All right. Well, I don't want to  
5 interfere with your case, but it would be a lot  
6 easier for me to see on one of the white maps.

7 MS. SHAHID: Okay. Your Honor, I think the easiest  
8 thing, if you don't mind, is I just turn to it  
9 in here.

10 THE COURT: That's fine. This is not Bates stamped  
11 or anything. How are we going to identify it?

12 MS. SHAHID: That's the figure that he testified to,  
13 Figure 6.2 in Appendix A of his report, the  
14 post-development drainage basin.

15 THE COURT: All right. I'm with you.

16 Q: And then if you could just trace the outline of  
17 that on Exhibit 9. Not mark on it, but just  
18 with your hand show.

19 A: This is a photograph of the Deerfield property.  
20 And the drainage basin runs along Plantation  
21 Drive where it actually starts to pick up some  
22 off-site drainage areas as you go around the  
23 property in this area. And then it comes up  
24 and there's a road here. I think that's called  
25 Garden Drive, and I think that the boundary we



1        have is based on the centerline of that road.  
2        And then it looks like it must follow this line  
3        through here, which is behind some multi-family  
4        areas. And I believe it goes down this road,  
5        and it goes off this photograph, and I think it  
6        comes back ... yeah, I believe it comes back in  
7        and ties into this Crooked Pine Drive and then  
8        comes back down to the traffic circle and then  
9        comes back down to Plantation Drive again. So  
10       it's an area like that.

11      Q: And your drainage basin that you've identified  
12        is a smaller area than the 1,100 acre watershed  
13        that LPA modeled, correct?

14      A: That's correct. The 1,100 acres discharges  
15        through an outlet downstream of Lake Elizabeth  
16        and Lake Dogwood to the Atlantic Ocean. The  
17        area that's depicted in this drainage basin  
18        exhibit discharges to the ... through a ...  
19        actually, there's two discharge points.  
20        There's one over here, and there's one ... the  
21        larger, more significant one is here in that  
22        area behind that new pond behind the old Bi-Lo.

23      Q: Okay. And so we've been speaking exclusively  
24        of node 27, but there's an additional outfall  
25        point that you have to model for and plan for?

1 A: Yes. It's in this area (indicating). And it  
2 actually discharges to the same outfall ditch  
3 that runs from the Glenns Bay Road area down to  
4 node 27, which is that new lake behind ... that  
5 new pond behind the old Bi-Lo building.

6 Q: Okay. After you have mapped the drainage  
7 basin, what do you do next in terms of your  
8 stormwater planning and modeling?

9 A: We would take those areas and develop  
10 hydrographs, which is a representation of the  
11 runoff generated by those areas for both the  
12 pre-development and post-development condition.  
13 And then ...

14 Q: Looking back at Figure 6.2 of Appendix A, the  
15 post-development drainage basin, I notice that  
16 you've used the areas plural. Are you talking  
17 about the individually labeled areas on Figure  
18 6.2?

19 A: Yes. Each one of those polygons or geometric  
20 shapes represents a smaller, yet smaller basin.  
21 And we establish a set of characteristics for  
22 each one of those small areas. I've heard  
23 others testify during this case about those  
24 types of parameters. It's the area, a curve  
25 number, which is a coefficient representing the

1 type of land use in the particular sub-basin,  
2 and a time of concentration. Those factors  
3 taken together are what are used to develop a  
4 hydrograph, which is a way for us to generate  
5 a flow that would come from a result of a  
6 stormwater event that would occur on any of  
7 these areas.

8 Q: If you could, turn to Figure 7.2 in Exhibit 31  
9 which is the Node Basin Schematic.

10 A: Yes. This is a ...

11 THE COURT: Figure 7.1?

12 Q: 7.2.

13 A: 7.2 is a Node Basin Schematic representation of  
14 a stormwater model. In this particular case,  
15 it's what's known as the downstream analysis.  
16 And it's a requirement of Horry County to  
17 perform this particular calculation. This is  
18 not the schematic representing the model for  
19 the subdivision.

20 Q: Okay. You did develop such a schematic,  
21 though?

22 A: Yes.

23 Q: Okay.

24 A: And I don't see it here.

25 Q: Okay. Let me show you Deertrack Exhibit 7. Is

- 1           this the report you prepared for Horry County?
- 2   A:    That's correct.
- 3   Q:    Okay.
- 4   **MS. SHAHID:**   And, Your Honor, at this time I would
- 5           offer Deertrack Exhibit 7 into evidence.
- 6   **THE COURT:**   Mr. Chandler?
- 7   **MR. CHANDLER:**   As I understand it, this is a
- 8           document that was created after DHEC approved
- 9           this project.
- 10   **MS. SHAHID:**   September 26, 2006, revised July 1st,
- 11           2008, after the approval.
- 12   **MR. CHANDLER:**   And the first one, what was the date
- 13           on it?
- 14   **MS. SHAHID:**   September 26, 2006; revised January 29,
- 15           2008. And approval was 2/29/08. This document
- 16           was finally revised after the approval.
- 17   **MR. CHANDLER:**   Okay. I don't have an objection.
- 18   **THE COURT:**   Without objection, Respondent's Exhibit
- 19           Number 70 you said?
- 20   **MS. SHAHID:**   Seven.
- 21   **THE COURT:**   Admitted without objection.
- 22           (Respondent Deertrack Golf's Exhibit Number 7 was
- 23           admitted into evidence.)
- 24   Q:    Okay. Does Exhibit 7 contain an example of the
- 25           schematic that I was attempting to get you to

1           locate in Respondent's 31?

2       A:    Yes, it does.       There's a pre-development  
3           schematic and a post-development schematic.

4       Q:    All right.    And let me find those in this  
5           document and then let me hand that document up  
6           to the court so he can see what we're talking  
7           about. I'll hand that one up to the Judge.

8       **THE COURT:** Thank you.

9       Q:    You've got the schematic in front of you?

10      A:    Yes, I do.

11      Q:    And what is the purpose of developing that  
12           schematic?

13      A:    This is a convenient way to visually observe  
14           and understand the stormwater model that  
15           analyzes the system proposed for the project.

16      Q:    How does anything on that schematic relate back  
17           to the sub-basins and drainage basins that  
18           we've previously identified?

19      A:    The basins are represented on the schematics as  
20           rectangles that have numbers in them. And they  
21           correspond to the ... I'm looking at the post-  
22           development drainage schematic. It's B4.

23      Q:    Uh-huh (affirmative response).

24      A:    And the numbers in the rectangles correspond to  
25           the basins on the post-development drainage

1 basin schematic.

2 Q: All right. And what does that schematic  
3 actually assist you or help you to do?

4 A: The post-development drainage schematic, the  
5 one labeled B4, is a convenient visual  
6 representation of how each basin connects to  
7 each node and how each node is connected by  
8 reaches to each other and to the off-site  
9 boundary conditions. The nodes are typically  
10 ... nodes in this context represent ponds or  
11 areas of intersection of drainage features. So  
12 the nodes in this case are representing the  
13 ponds proposed for the subdivision. The  
14 rectangles represent the areas that drain to  
15 those ponds.

16 Q: Okay. Is there anything about that schematic  
17 or in the process of developing that schematic  
18 that then takes you to the actual modeling?

19 A: Yes. The model, which is a mathematical  
20 representation of the drainage system, contains  
21 the same numbers. There's a section of nodes  
22 and a section of reaches. And you can look at  
23 the model and refer to this schematic and more  
24 easily understand how one node is connected to  
25 another node and how all the nodes ultimately

1 discharge from the site. And this document is  
2 kind of independent of the physical mapping of  
3 the property. Sometimes that's hard to follow.  
4 But this makes it a lot easier to understand  
5 what node is connected to the next node.

6 Q: Okay. And are we at the point now where you  
7 would actually begin inputting into the  
8 computer model?

9 A: Yes. You would use this document to more  
10 conveniently input data into the computer  
11 model.

12 Q: All right. Now, how many years have you been  
13 doing stormwater permitting and stormwater  
14 design?

15 A: I've been doing it the entire time that I've  
16 been with ETS for over 20 years, 23 years.

17 Q: And how many years have you been relying on  
18 computer models to help predict the performance  
19 of your design?

20 A: Although we've had different models, we have  
21 had at least one computer simulation model in  
22 our office for our use the entire time that  
23 I've been there.

24 Q: Are there particular models that you are  
25 required to use for OCRM or that they will

1 accept?

2 A: They have expressed their preference to certain  
3 brands, if you will, in the past. And the one  
4 that was used in this case that we use most  
5 commonly is called the Interconnected Pond  
6 Routing Program. It's usually referred to as  
7 ICPR. It's developed by a company called  
8 Streamline Technologies. And we've had this  
9 since the early '90s.

10 Q: Okay.

11 A: Prior to that we used another program, but this  
12 was .... this was the one we upgraded to and  
13 still use.

14 Q: Is it common practice in your business, in the  
15 insurance .... I'm sorry, the engineering  
16 profession to utilize models in stormwater  
17 management, stormwater design?

18 A: Yes, it's very common.

19 Q: All right. Are there any other tools available  
20 that are better or more helpful for the  
21 purposes that they're using them than these  
22 computer models?

23 A: You mean like other computer programs?

24 Q: Something outside of a computer program to help  
25 you predict site performance?



1 A: Not that I can think of.

2 Q: Okay. So this is the tool, standard tool used  
3 by the industry?

4 A: There are ... there are tables and charts, and  
5 I think tools is a good terminology for them,  
6 that help you quickly and conveniently size a  
7 pipe based on a known flow. We have some  
8 things like that. But as far as a complicated,  
9 interconnected pond stormwater system that has,  
10 I mean, multiple stormwater basins and multiple  
11 interconnected stormwater nodes, and combine  
12 that with the requirement that we analyze  
13 multiple rainfall events, the most convenient  
14 and efficient way to do that is with a computer  
15 program such as the one that we use, the  
16 Interconnected Pond Routing System. There are  
17 other methods, but they pretty much all these  
18 days involve some type of computer program that  
19 does it.

20 Q: And I don't want to get too bogged down in the  
21 details, but can you explain how you would  
22 tailor the model? And I guess what I'm talking  
23 about is your inputs into the model so that the  
24 output of the model is based on data reflective  
25 of your site conditions.

1 A: Well, we would ... there are a number of  
2 parameters that you can make a judgment about  
3 and input into the model. But with ...  
4 especially with our firm's experience in doing  
5 this type of modeling, we would ... we would  
6 call on our experience with other similar  
7 projects and the way that we have modeled them  
8 and seen the models respond and correlate with  
9 the final results. And we might make a  
10 adjustment to a roughness factor or something  
11 like that. But essentially the model has a  
12 method of inputting pipes and ditches and the  
13 nodal representation of ponds that allow you to  
14 simulate the performance of a stormwater system  
15 in the computer and predict how the system will  
16 behave during a storm event.

17 Q: Okay. Now, how did the LPA reports, the three  
18 LPA reports affect or influence your modeling  
19 of this site? Your modeling of the performance  
20 of your proposed plan?

21 A: Well, although we have copies of the reports  
22 produced by LPA, which was a study of a much  
23 larger watershed, the only thing that was  
24 really important to our report coming out of  
25 the LPA report was the condition of what has

1        been described as node 27, which today is a  
2        pond or a ... yes, it's a pond that has been  
3        constructed and enlarged by the county located  
4        behind the old Bi-Lo. Because our outfalls  
5        from the Deerfield project tie-in at that  
6        location, the only significant data from the  
7        LPA report that is important to the performance  
8        of our model is the tailwater condition in our  
9        model or the ... and the condition that occurs  
10       in the LPA model at their node 27.

11    Q:    Okay. And I'm going to show you ... let me see  
12       what I've done with it. I'm looking for that  
13       October 2007 ... I'm going to show you what's  
14       in evidence as Respondent Deertrack Exhibit 8,  
15       the October 7th LPA report, and ask you if the  
16       assumptions regarding node 27 contained in that  
17       report were utilized in your model? And I can  
18       actually help you out and turn you to ... we  
19       are hampered because the pages are not numbered  
20       in this report, but I will represent for the  
21       record that there's a section of the October  
22       2007 report entitled Analysis of Proposed  
23       Changes. And then the next page says Proposed  
24       Conditions Model. Did you refer to that in  
25       your modeling efforts?

1 A: Yes, we did. This page, again, there's not a  
2 page number, but there's a summary of the  
3 results of their ... in fact, I'll read the  
4 sentence of this paragraph. It says, "The  
5 results will be compared at several strategic  
6 locations." And there is a number of nodes  
7 depicted here. And node 27 is listed at the  
8 junction of the outfall from  
9 Caropines/Deerfield and the existing channel  
10 from Glenns Bay area.

11 Q: Okay..

12 A: And it lists various stormwater events. And we  
13 used the proposed condition water surface  
14 elevation for node 27 for the 25-year event.  
15 And it's listed here as 21.38.

16 Q: When you say you used it, how did you use it?

17 A: Well, we would have been anticipating that the  
18 existing or, excuse me, that the significant  
19 condition of that connecting node, node 27,  
20 would have a peak water surface elevation of  
21 21.38 feet during the 25-year storm event. And  
22 we would use that number as the elevation at  
23 the tie-in point at one of these nodes. In our  
24 post-development model, it would have been  
25 that, I believe what is labeled as Out, O-U-T,

1           1, the number 1, dash X and at X we would  
2           insert the two-year, ten-year, 25-year storm  
3           event. So at Out 1-25, we would typically  
4           place a peak stage elevation of 21.38. And I  
5           recall that, in an abundance of caution, we  
6           used a slightly higher number there. We used  
7           an elevation of 22. And the only explanation  
8           I can give you for that is just as a safety  
9           factor we rounded it up. And so we used an  
10          elevation of 22 as the peak stage for our tie-  
11          in point. Both, I believe, at the Out 1  
12          location and the Out 2 location, and it's  
13          because they both tie-in to that, what I think  
14          has been referred to as the Glenns Bay Road  
15          ditch, which is just upstream of node 27.

16       Q: Explain to me what it means on the ground when  
17       you're ... assume your project is in place and  
18       it's raining, and we're trying to look to see  
19       if our predictions came true, what does it mean  
20       to say 21.38 is peak water surface elevation at  
21       node 27? How is that going to look?

22       A: The real life or on the ground explanation of  
23       using that water surface elevation is to say  
24       that, at that discharge point downstream of our  
25       project, the water surface elevation of that

1 pond is going to raise from its normal water  
2 elevation, which I believe has been mentioned  
3 here as starting out about elevation 15.5. As  
4 a result of the surface water runoff coming  
5 from the contributing watershed that it's a  
6 part of, you can expect to see the water  
7 surface elevation in that pond rise from 15.5  
8 to 21.38 feet and then subsequently fall back  
9 down to that 15.5 elevation. So, at some point  
10 during that storm event, the Deerfield project  
11 must discharge and function while experiencing  
12 that water surface elevation, that 21.38.

13 Q: And how do you make that happen? What is your  
14 objective to making sure that you can discharge  
15 at peak times while the pond is at its peak  
16 water surface elevation?

17 A: It is the nature of the type of development of  
18 taking a undeveloped piece of property and  
19 installing roads and houses and hard surface  
20 features, that the runoff produced in those  
21 developed areas will be increased. And in  
22 order to have your post-development stormwater  
23 be capable of discharging into that receiving  
24 water body while that receiving water body  
25 experiences an increase in its water surface

1 elevation, we have to attenuate that increase  
2 in surface runoff within our development. And  
3 we do that typically, and in this case, by  
4 providing ponds that have the ability to store,  
5 temporarily store stormwater. So the runoff  
6 from those drainage areas could be collected in  
7 the on-site ponds and the additional runoff  
8 would store in those ponds temporarily. And  
9 then through output control structures, it  
10 would be released into the downstream receiving  
11 water body, in this case node 27, that pond, at  
12 a reduced rate that that water body is capable  
13 of receiving.

14 Q: Okay. I'm going to show you what's been marked  
15 as Deertrack Exhibit 15 and ask if you could  
16 identify 15. Actually, the first page is a  
17 front page of a set of construction plans, but  
18 it bears the stamp of DHEC. And I'm really  
19 more interested in the second page of the  
20 exhibit. I am so sorry. There's no easy way  
21 to do this.

22 A: Yeah, this is the overall plan sheet showing  
23 the proposed Deerfield project.

24 Q: Okay. Does it reflect the ponds that you just  
25 mentioned that you needed to incorporate in

1 your design?

2 A: Yes, it does.

3 Q: Okay.

4 MS. SHAHID: Your Honor, at this time, I would offer  
5 Respondent's Exhibit 15 into evidence.

6 THE COURT: Mr. Chandler?

7 MR. CHANDLER: No objection.

8 THE COURT: Respondent's 15 admitted without  
9 objection.

10 (Respondent Deertrack Golf's Exhibit Number 15 was  
11 admitted into evidence.)

12 Q: Okay. Now, did you determine whether or not  
13 pre-development there was existing storage  
14 capacity on the site, pre-development?

15 A: During ... in the analysis of the pre-  
16 development condition, we found that the  
17 existing stormwater ponds on the property did  
18 provide a volume of storage.

19 Q: Okay. Now, did you ... do you have an opinion  
20 as to whether those ponds were efficiently  
21 performing?

22 A: I believe that they were not very efficient.

23 Q: And why is that?

24 A: Well, although they were interconnected, they  
25 were at, some were in the very high elevation,



1       some were very shallow, and overall I think we  
2       determined based the water surface elevations  
3       and the information from our surveys and site  
4       visits and examinations that there was maybe  
5       about five or six acre-feet of storage  
6       available with the existing ponds.

7       Q:    Pre-development?

8       A:    In the pre-development condition.    That's  
9       right.

10      Q:    And who's utilizing those existing ponds now  
11      for stormwater management?

12      A:    Well, currently they drain portions of the  
13      existing golf course and the existing  
14      subdivision.

15      Q:    Okay.    And could the inefficiencies in the  
16      ponds, as you've observed, be part of the  
17      reason that the subdivision would be prone to  
18      flooding?

19      A:    It's possible.

20      Q:    Okay.    Is there an opportunity with the new  
21      development project from Deertrack Golf, Inc.  
22      for you to improve storage capacity for the  
23      existing development, Deerfield Plantation?

24      A:    Yes.    Yes, there is.

25      Q:    All right.    And is existing storage going to be

1           beneficial ... is improving existing storage  
2           for ... let me strike that. Is improving  
3           storage capacity for the existing development  
4           beneficial to the existing development?

5       A:     Could you repeat that?

6       Q:     If you improve the storage capacity by  
7           improving the ponds, is that beneficial to the  
8           development, Deerfield Phase IIB?

9       A:     Yes, it is.

10      Q:     All right. And why is that?

11      A:     Well, the runoff coming from both the surface  
12           water runoff and the post-development condition  
13           coming from both the proposed Bill Clark Home's  
14           development as well as the existing subdivision  
15           will be collected in the proposed stormwater  
16           system, including the proposed ponds, and it  
17           will be released to the receiving water body  
18           and it will improve the flooding condition of  
19           the site.

20      Q:     Okay. And I know that we've got a plan  
21           schematic that reflects the ponds and I'm also  
22           going to show you Exhibit 19.

23      **MS. SHAHID:** Madam Court Reporter, was Exhibit 19  
24           admitted into evidence?

25      **COURT REPORTER:** It was.

1 Q: I'm going to show you Deertrack Exhibit 19 and  
2 ask you what the two pages of 19, labeled 19A  
3 and B, compare.

4 A: I believe that these are two exhibits that were  
5 prepared by the Horry County engineering and  
6 stormwater department staff as a part of some  
7 discussions that they were having about this  
8 project, and it illustrates the comparison of  
9 the proposed development area of the Deerfield  
10 project as it pertains to the existing ponds  
11 and their configuration and the proposed ponds  
12 after the development.

13 Q: Okay. And are more ponds going to be  
14 incorporated into the new development?

15 A: There will be more pond surface area in the  
16 post-development condition.

17 Q: Than is currently out there?

18 A: That's correct.

19 Q: How many ponds are in the post-development  
20 plan?

21 A: I believe there's 17.

22 Q: All right. And are those ponds to store  
23 stormwater coming off the existing development,  
24 Deerfield Plantation Phase IIB?

25 A: They will collect and store stormwater runoff

1 from both the existing subdivision as well as  
2 the redeveloped golf course.

3 Q: And do you have an opinion as to whether the  
4 new ponds that you will construct will function  
5 better than the ponds that are out there?

6 A: In my opinion, they will function better from  
7 a standpoint of controlling stormwater.

8 Q: Okay. You've had the opportunity to study this  
9 drainage basin that you've identified as part  
10 of this ... by drainage basin, I mean you've  
11 had the opportunity to study the existing  
12 development, the areas that contribute drainage  
13 to the existing development and the Old South  
14 Golf Course?

15 A: Yes, that's correct.

16 Q: And you've had the opportunity to read and  
17 review the LPA reports and discuss the matter  
18 with County officials?

19 A: Yes, that's correct.

20 Q: Okay. And you understand, as an engineer, the  
21 reasons why these properties were prone to  
22 flooding up until 2001?

23 A: I have an understanding of it, yes.

24 Q: Okay. What is your understanding?

25 A: Well, I believe that the existing subdivision

1 was developed prior to the existence of the  
2 current type of stormwater regulations where  
3 the ... for example, the County staff would  
4 require specific performance requirements for a  
5 design stormwater system to serve such a  
6 development, and essentially, just built a golf  
7 course with some stormwater ponds and built  
8 lots around it and it wasn't necessarily  
9 anticipating fully draining the entire project.  
10 And the County today has specific requirements  
11 for how, what elevation you can build your  
12 house at, and I think a number of the houses in  
13 the existing subdivision were simply built too  
14 low.

15 Q: Okay. I'm going to show you what's been marked  
16 as Deertrack Exhibit 11A and ask if you can  
17 identify 11A and 11B and 11C?

18 A: Eleven A shows the property, the proposed  
19 development tract, and it has a drainage basin  
20 area identified which corresponds to the pre  
21 and post-development extent of the drainage  
22 basins used in the stormwater calculations, and  
23 also hatched an area to indicate the difference  
24 between the existing subdivision areas and the  
25 proposed redeveloped golf course.

1 Q: And before I offer this into evidence, 11B and  
2 C, is that a drawing that you prepared for me  
3 to indicate some work that you're going to be  
4 doing as part of your development?

5 A: Eleven B and 11C are copies of the pre-  
6 development drainage basins and the post-  
7 development drainage basins that are a part of  
8 our stormwater reports and they have been  
9 highlighted ...

10 Q: Okay. Let me stop you there.

11 MS. SHAHID: Your Honor, at this time I would offer  
12 11A, B, and C into evidence.

13 THE COURT: Mr. Chandler?

14 MR. CHANDLER: Mary, let me just make sure. No  
15 objections.

16 THE COURT: Eleven A, B, and C for Respondent  
17 admitted without objection.

18 (Respondent Deertrack Golf's Exhibit Numbers 11A,  
19 11B, and 11C were admitted into evidence.)

20 Q: Okay. If you can, indicate to me on 11B, which  
21 I believe you said is a pre-development  
22 drainage basin, what that pink highlighting is  
23 intended to reflect.

24 A: The area in pink is the area that contributes  
25 to the drainage that passes through that

1           portion of the existing residential subdivision  
2           in an area that's been referred to here as  
3           Circle Drive.

4       Q:    Okay.   If you could hold it up and point for  
5           the Judge, is this Circle Drive down at the  
6           bottom?

7       THE COURT:  I know where it is.  I'm with you.

8       MS. SHAHID:  Okay.

9       Q:    All right.   How did you determine that that  
10           area that you've shaded in pink actually drains  
11           through to Circle Drive?

12      A:    By studying the topography ... by studying the  
13           topography and the same maps and documents that  
14           we used to establish the drainage basin  
15           boundaries to start with.  We simply picked a  
16           different discharge location downstream of the  
17           Circle Drive area, and by definition of a  
18           watershed or a drainage contributing area, we  
19           simply identified, based on our judgment, what  
20           areas were draining through that particular low  
21           area of Circle Drive.

22      Q:    And why was that important in your analysis?

23      A:    That is probably the most ... from a stormwater  
24           drainage standpoint and stormwater design  
25           standpoint, that's probably the most sensitive

1 area in the project.

2 Q: And as a sensitive area, is it affected by the  
3 contributions from these other basins  
4 identified and shaded in pink?

5 A: That's correct.

6 Q: Okay. Now, in your proposal ... in your  
7 opinion, would it be beneficial to residents in  
8 the existing neighborhood if some of that water  
9 draining towards them could be rerouted?

10 A: Yes, it would.

11 Q: And why would it be beneficial?

12 A: It would result in a reduction in that nuisance  
13 flooding that has been common in that area up  
14 to this point.

15 Q: How would it lead to a result in reduction in  
16 nuisance flooding?

17 A: With less area contributing stormwater to their  
18 location, they would experience less flooding.

19 Q: All right. I'm going to ask you to refer to  
20 Exhibit 11C and tell me what that represents.

21 A: This is a ... this shaded area is a depiction  
22 of the amount of drainage area will be  
23 contributing to the Circle Drive area after our  
24 project is developed.

25 Q: Okay. And how did you as a designer eliminate



1       ... what percentage of drainage did you  
2       eliminate from the Circle Drive area?

3     A:   I don't know a percentage, but I can express it  
4       as the area that is contributing to that point  
5       of interest in Circle Drive and the pre-  
6       development is about 100 acres, maybe a little  
7       more.

8     Q:   Okay.

9     A:   And it's less than ... you know, it's probably  
10       about 12, ten to 12 acres in the post-  
11       development.

12    Q:   Okay. Now, how did you as an engineer and  
13       designer route that water around the  
14       subdivision ...

15    A:   If I could ...

16    Q:   ... or the sensitive part of the drainage  
17       basin?

18    A:   ... use this drawing. Most of that water is  
19       ... most of that water is coming to this area  
20       from the off-site area in this direction  
21       (indicating) and it will be intercepted by  
22       these proposed stormwater ponds along the  
23       perimeter of the proposed development. They  
24       are interconnected by underground pipes, and  
25       there's a series of underground pipes that will

1 route that water around the Circle Drive area  
2 to the point of discharge that all this  
3 stormwater leaves the property and is actually  
4 received by that receiving node, node number  
5 27, that new pond. So that water will have a  
6 route that will go around the Circle Drive area  
7 and it will discharge downstream of that  
8 particular part of Circle Drive.

9 Q: Okay. Were you present in the courtroom  
10 yesterday when Mr. Jeff Farrell testified on  
11 the part of Bill Clark Homes?

12 A: No, I'm afraid I was not.

13 Q: Okay. I'll just represent to you that Mr.  
14 Farrell testified at one point that he felt  
15 like his proposal would help rather than hurt  
16 the existing homeowners in Deerfield  
17 subdivision. My question to you is, does it  
18 help them in terms of their drainage problem to  
19 route the drainage around them in conjunction  
20 with increasing storage capacity with these new  
21 ponds?

22 A: Yes, in my opinion it will help their drainage  
23 situation.

24 Q: Okay.

25 A: As far as the nuisance flooding they've

1 experienced. I expect that they will  
2 experience less of that.

3 Q: Now, you're required by Horry County and by  
4 OCRM to model for three design storm events,  
5 the two and the ten for OCRM and the 25 for  
6 Horry County, correct?

7 A: That's correct.

8 Q: All right. And as I understand, your  
9 requirement is post-development, peak discharge  
10 for those design storms cannot exceed pre-  
11 development peak discharge?

12 A: That's correct.

13 Q: Okay. Did you arrive at conclusions through  
14 your planning, your engineering, your design,  
15 and your modeling as to whether or not you  
16 could meet the OCRM requirements for the two  
17 and the ten-year design storm events?

18 A: Yes.

19 Q: All right. And what was your conclusion in  
20 that regard?

21 A: That the proposed project will meet those  
22 parameters established by OCRM.

23 Q: Okay. In other words, the peak development  
24 discharge rate during those storm events will  
25 not, post-development will not exceed what it

1 is now?

2 A: That's correct.

3 Q: That's the standard? And that's accomplished  
4 by the storage that you've created on the site?

5 A: Yes, that's correct.

6 Q: Okay. Now, you also were required to meet the  
7 25-year design storm event. And have you  
8 concluded and do you have an opinion as to  
9 whether or not you satisfy the requirement  
10 imposed by Horry County for the 25-year storm  
11 even?

12 A: Yes, I am. And I believe that they have  
13 expressed that as well.

14 Q: Okay. Now, there's been references in  
15 testimony and from counsel for the petitioner  
16 to a plan of Bill Clark Homes that amounts to  
17 construction of a berm around the existing  
18 properties. Are you familiar with that  
19 argument or that testimony?

20 A: Yes, I've heard that.

21 Q: All right. What is your understanding of that  
22 argument?

23 A: I believe that they're concerned that the  
24 elevations of the roads and the lots proposed  
25 for the new development is going to restrict

1 the flow of stormwater from the existing  
2 subdivision.

3 Q: Okay. And is there something in the OCRM plans  
4 that may have triggered that concern?

5 A: Possibly the grading plan.

6 Q: All right. And I'm going to hold in front of  
7 you the OCRM plans that bear the stamp of OCRM  
8 that they are the approved plans and ask if you  
9 can find that grading plan in these.

10 A: It's actually on multiple pages.

11 Q: Okay.

12 A: I'm going to say it's on sheets 11 through 16.  
13 I'm not sure if that other sheet was one. It  
14 might be.

15 Q: And I am not necessarily offering these plans  
16 into evidence, but have them available for you  
17 to refer to so that you can explain to the  
18 Court what you think is causing that concern.

19 A: They are, as I can understand, I've not really  
20 heard their specific comments on that matter,  
21 but I believe that they were looking at a set  
22 of plans that was submitted originally that  
23 depicted the proposed development being  
24 constructed on the original contours ... I  
25 don't want to use the word original, on the

1 contours of the golf course as it exists today.  
2 And during the construction of the golf course,  
3 they essentially created artificial dunes and  
4 mounds which are very typical of golf courses,  
5 and they raised the elevation of the golf  
6 course above what was certainly the original  
7 ground elevations. In our original plans  
8 depicted in some parts of the proposed  
9 subdivision road elevations that tied to those  
10 current golf course elevations and subsequent  
11 to comments from OCRM and Horry County, we have  
12 lowered those roads to more closely adhere to  
13 what would have been the original ground  
14 surface elevation of that property before the  
15 golf course was constructed. That's not to say  
16 that I'm stating that the proposed roads and  
17 the proposed subdivision are at that elevation,  
18 but they're close to it.

19 Q: Okay. And at my suggestion, did you prepare an  
20 exhibit that attempts to illustrate the  
21 differences in elevations between the existing  
22 development and the new development?

23 A: Yes. At your request, a schematic drawing was  
24 prepared that picked out some strategic  
25 locations in the proposed subdivision and

1 identified some proposed center line of road  
2 elevations, as well as the corresponding 25-  
3 year storm event peak stages that would occur  
4 at those particular strategic points in the  
5 roads.

6 Q: Okay. And is that reflected in Respondent's  
7 Exhibit 12?

8 A: Is this Exhibit 12?

9 Q: Yes, it is.

10 A: Yes, that's what this is. It's a, really just  
11 a sketch on top of a rough printout of the  
12 subdivision.

13 Q: Okay.

14 MS. SHAHID: Your Honor, at this time I would offer  
15 Exhibit 12 into evidence.

16 THE COURT: Mr. Chandler?

17 MR. CHANDLER: No objection.

18 THE COURT: Respondent's 12 admitted into evidence  
19 without objection.

20 (Respondent Deertrack Golf's Exhibit Number 12 was  
21 admitted into evidence.)

22 Q: Now, going back to something you said earlier.  
23 You testified that upon hearing comments from  
24 Horry County about utilizing the existing  
25 contour or existing elevation of the golf

1 course to show your building plans, you lowered  
2 that. Do you know how much it's been lowered  
3 by?

4 A: Several feet.

5 Q: Okay.

6 THE COURT: Several meaning?

7 MR. BEVINS: Two or more.

8 THE COURT: I thought it was four or more?

9 MR. BEVINS: Approximately.

10 THE COURT: Two or more.

11 Q: Okay.

12 A: I think it varies. I'm not referring to any  
13 particular location, but just throughout the  
14 extent of the roads shown on that plan, at  
15 least a couple of feet. I would say at least  
16 two feet.

17 Q: Was there anything that limited you from taking  
18 it all the way down to the same elevation as  
19 the existing property?

20 A: Well, I'm not sure this will answer that  
21 question precisely, but the limitation in this  
22 case would be a requirement by Horry County  
23 that the lowest elevation in our proposed roads  
24 must be above the peak stage of the 25-year  
25 storm event.



1 Q: Okay. And then where are the roads in  
2 relationship to the houses in terms of  
3 elevation in your new design?

4 A: Oh, the proposed houses will be at an elevation  
5 of a foot above the elevation of the centerline  
6 of the road.

7 Q: Okay. Now, tell me what this drawing is  
8 intended to illustrate, Exhibit 12.

9 A: This compares the road centerline elevation at  
10 the high points and the low points of the  
11 roads, and it also compares at those same  
12 points the elevation of the peak stage of the  
13 water and the stormwater system at those same  
14 locations at the high points and the low points  
15 of the streets.

16 Q: And what does this help you to illustrate?  
17 What point does this help you to illustrate?

18 A: This indicates the proposed elevation of the  
19 new subdivision compared to the existing one.

20 Q: All right. What is the color coding?

21 A: The legend indicates that the numbers  
22 highlighted with green are the elevation of the  
23 high points of the road. The pink are the  
24 elevations of the low points in the road, and  
25 the blue is the elevation of the peak stage of

- 1 the 25-year storm event in the stormwater  
2 system.
- 3 Q: Okay. For your development or for the existing  
4 development?
- 5 A: Well, in this case, the roads are in the  
6 existing development and the stormwater system  
7 would be adjacent to both.
- 8 Q: Okay. But I mean, these elevations?
- 9 A: Are in the proposed Bill Clark Homes  
10 subdivision.
- 11 Q: All right. Is there a particular area at  
12 Circle Drive that we need to be focusing on?
- 13 A: I think ... I believe that the low elevation of  
14 the critical location is this area that's  
15 circled (indicating).
- 16 Q: Okay. You have a circle there?
- 17 A: Uh-huh (affirmative response).
- 18 Q: Okay. And what is that critical elevation?
- 19 A: I believe it's about 22.8.
- 20 Q: All right. There's also a 22.3 here.
- 21 A: No, that's an elevation of a proposed swale.
- 22 Q: All right. So 22.8 is the existing elevation  
23 shown on this particular lot on Circle Drive  
24 and it's located above lots, proposed lots 102,  
25 103, correct?

1 A: Yes, that's correct.

2 Q: All right. Now, what elevations of your  
3 development are adjacent to that?

4 A: Well, this exhibit is depicting the elevations  
5 of the centerline of the road. So the  
6 centerline of the roads in that area are, they  
7 range from 23 to it looks like a high of about  
8 25.8.

9 Q: Okay. And so if the centerlines of the roads  
10 are at 23 to 25, what will the houses be? What  
11 elevation would the houses be?

12 A: They would typically have their floor  
13 elevations about a foot higher.

14 Q: Okay. So 24 to 26, correct?

15 A: Yes.

16 Q: All right. And so that's a difference between,  
17 of about four feet?

18 A: It could be, yes.

19 Q: At that critical point of 22. All right. What  
20 effect is that going to have on that abutting  
21 lot owner that has that circle on his lot and  
22 that 22 foot elevation, in your opinion?

23 A: The effect would be that they would have a view  
24 of a lot that's going to be somewhat higher  
25 than their lot.

1 Q: Okay. Is it accurate to describe your row of  
2 houses that are going to be elevated two feet  
3 or more above these houses as a berm or a wall?

4 A: I wouldn't describe it as a berm.

5 Q: Now, why wouldn't you?

6 A: Well, to me a berm is a, is not going to be  
7 shaped like these lots.

8 Q: Okay. Was does berm imply to you?

9 A: A mound or a continuous ...

10 THE COURT: Like a levy?

11 MR. BEVINS: Like a levy.

12 Q: Levy is also a word that they used. Okay.  
13 Well, in reality ...

14 A: I don't believe it will be shaped like a berm  
15 or a levy because from the elevation of the  
16 finished floor of the house, the elevation is  
17 going to go down to a swale in between each  
18 building pad. So it won't be a continuous  
19 berm. There will be a high and a low and the  
20 highs are going to vary relative to the  
21 elevation of the roads.

22 Q: Okay. And can you maybe just do a sketch to  
23 just sort of illustrate what you're talking  
24 about with the swale and the building pad.

25 THE COURT: While you're doing that, let me ask.

1           Would the swale be entirely upon the new lots  
2           or will they impose upon the existing lots to  
3           some extent?

4   **MR. BEVINS:**   They will be on the new lots.   There  
5           are some swales that already exist in the back  
6           of some of the existing lots, but the swales  
7           I'm talking about are between the new lots.

8   **Q:**   Okay.   If you would hold that up and just  
9           explain what that's supposed to depict.

10   **A:**   It's very rudimentary, but what I'm suggesting  
11           is that the houses are going to be on the  
12           building pads and between the houses are going  
13           to be lot swales that are going to be lower  
14           than the proposed building pads.

15   **Q:**   Okay.

16   **A:**   So it would not have the shape of a berm.

17   **Q:**   Okay.

18   **A:**   As my understanding of a berm.

19   **Q:**   In your opinion as a professional engineer,  
20           when you construct houses as at the elevations  
21           that are suggested here, which according to  
22           Horry County have to be at least a foot above  
23           the centerline of the road elevation, and that  
24           results in construction adjacent to this  
25           neighborhood that could be as much as four feet

1 higher than the existing neighborhood, how is  
2 that going to affect their stormwater problems,  
3 the sensitivity of the drainage area, and the  
4 potential for flooding?

5 A: Well, their stormwater is going to be conveyed  
6 by a series of ditches and pipes that are  
7 located on the side of the new construction  
8 where those existing properties are located,  
9 and it will be carried to other stormwater  
10 pipes and these are ... I'm referring to  
11 underground stormwater pipes that will convey  
12 that water to the ultimate discharge point  
13 leaving the property. Some of it will go into  
14 the stormwater ponds. I believe that most of  
15 that area that we're referring to Circle Drive  
16 probably has a direct route to the offsite  
17 discharge location.

18 Q: So, in your opinion, is there going to be  
19 increased flooding or increased potential  
20 flooding, once your development is built, due  
21 to the higher elevation of your houses?

22 A: Not in my opinion, no.

23 Q: Okay. And that's because of the other  
24 stormwater measures that you just mentioned to  
25 the Judge that are being installed as part of

1           your development?

2       A:     The other stormwater measures and the fact that  
3           we're rerouting approximately 100 acres of  
4           offsite drainage that's going through there  
5           today.

6       Q:     Okay.

7       MS.   SHAHID:     Your Honor, I have no further  
8           questions.

9       THE COURT:   Let's break here for lunch and come back  
10           at 2:00. Does that suit everybody?

11      MS.   DIECK:     Your Honor, as a housekeeping matter  
12           very quickly.

13      THE COURT:   Yes.

14      MS.   DIECK:     I spoke with counsel. The Department  
15           plans to call one witness, Shannon Hicks, and  
16           she's only available today. I for some reason  
17           didn't know I was going to go four days and so  
18           she can't make arrangements to be here  
19           tomorrow. Counsel has agreed to take her out  
20           of order if necessary at the end of the day.  
21           Would that be okay with the Court?

22      THE COURT:   Fine with me. Mr. Chandler?

23      MR.   CHANDLER: I have no problem with that.

24      MS.   DIECK:     Thank you, Judge.

25      THE COURT:   Thank you.

(Lunch break from 12:31 p.m. until 2:05 p.m.)

THE COURT: You were through, Ms. Shahid?

MS. SHAHID: Yes, sir.

THE COURT: Anything from the others?

MS. DIECK: No, Your Honor.

THE COURT: Mr. Barnett?

MR. BARNETT: No, sir.

THE COURT: Mr. Chandler?

MR. BEVINS - CROSS-EXAMINATION BY MR. CHANDLER:

Q: Mr. Bevins, can you certify or guarantee to the residents of Phase IIB of Deerfield Plantation that their homes won't flood after this new development is built?

A: I can say that based on the work that we have done, that they will not be flooded by the 25-year storm event if the system that we've designed is constructed as is depicted on our plans.

Q: Okay. You will certify to them that if it's built as depicted, that they won't flood in a 25-year storm; is that what you're saying?

A: Yes, I'm saying that. I believe I already have.

Q: Okay. And now, 25-year storm that you depict, is it the same kind of storm event that Mr.



1 Powell and Mr. Garigen talked about that meets  
2 this perfect bell curve?

3 A: That's ... I think I would go along with that.

4 Q: Okay. And ...

5 A: I really don't think it's a bell curve, but  
6 it's a ... it's a typical hydrograph shape that  
7 conforms to the SCS type three rainfall  
8 distribution curve for this portion of South  
9 Carolina and the 25-year storm event is  
10 specific to each geographic location.

11 **THE COURT:** What is SCS?

12 **MR. BEVINS:** It's the Soil Conservation Service, a  
13 branch of the United States Department of  
14 Agriculture. They have established the  
15 procedure for doing this type of calculation,  
16 and in general, the methodology that we utilize  
17 to arrive at these stormwater calculations is  
18 just commonly referred to as the SCS method.

19 Q: Okay. Now, so you haven't modeled for any of  
20 these kinds of thunderstorms that we have that  
21 have these sudden bursts of high rates of  
22 rainfall, have you?

23 A: Our model is based on the requirements of the  
24 Horry County Engineering and Stormwater  
25 Department, which calls for essentially the 25-

1 year storm event based on the method that I  
2 just mentioned, the SCS method, and the  
3 requirements of the OCRM, which they also  
4 recognize the use of the SCS method of  
5 preparing the stormwater calculations and  
6 modeling. And they have the two-year and the  
7 ten-year events, so it is ... I think that  
8 everyone in this case up to this point was  
9 using that terminology of a bell curve as a  
10 slang term, and what they're actually referring  
11 to is the typical unit hydrograph shape that  
12 results from utilizing the SCS method. It's  
13 actually the SCS Type 3 rainfall distribution  
14 curve.

15 Q: Okay. Is that a long way of saying no to my  
16 question of did you model these kind of sudden  
17 rapid downpours that we have?

18 A: No, we did not model that. We modeled what was  
19 required by the applicable regulations.

20 Q: Okay. And in performing your model, you used  
21 figures that came from the LPA report?

22 A: We received copies of the reports and we  
23 studied them and we extracted some information  
24 from them, as well as received some information  
25 from members of the County's engineering staff.

1 Q: Okay. And you testified a little while ago  
2 that your starting point was an elevation of a  
3 little under 22 feet at what we call node 27,  
4 because that was the number that LPA had come  
5 up with; isn't that right?

6 A: That's correct.

7 Q: Okay.

8 A: And we actually used a slightly higher number  
9 than they provided as a matter of a safety  
10 factor.

11 Q: Okay. And their report doesn't have anything  
12 in it other than a conclusory statement about  
13 calibration of that model, does it?

14 A: Would you mind repeating that?

15 Q: The LPA report, other than the initial report  
16 having a statement that they did a calibration,  
17 there's no figures in there explaining how or  
18 when they calibrated that model?

19 A: I didn't ... I did not see or find any material  
20 relating to the model's calibration, no.

21 Q: Okay. And you haven't done any kind of  
22 verification or calibration either, have you?

23 A: No, I have not. I have not been required to by  
24 any of the agencies that have reviewed our  
25 calculations or plans. In fact, I've never

1           been asked by any agency in the course of my  
2           career to perform a calibration on any of the  
3           models for literally hundreds of stormwater  
4           projects that we've submitted to both the State  
5           and the local agencies having jurisdiction over  
6           these matters.

7   Q:    Okay. And how many projects have you worked on  
8           where there's a subdivision at a low elevation  
9           that has a history of known flooding problems?

10   A:    I would say a handful.

11   Q:    Just a handful? When's the last time?

12   A:    It's hard for me to recall an actual project.  
13           I think there was one ... the actual name of  
14           the project doesn't come to mind at this  
15           moment.

16   Q:    Okay. Now, your map you've got up here that's  
17           been marked as Deertrack Exhibit Number 12, all  
18           of these colored in elevations you have here,  
19           they're elevations that are basically on the  
20           roadway in the proposed new development?

21   A:    That's correct.

22   Q:    Okay. And none of your colored in elevations  
23           represent any of the elevations within  
24           Deerfield Phase IIB, do they?

25   A:    No, that's correct.

- 1 Q: Okay. And your map shows road elevations at  
2 one point here on, what is this called, Ricola  
3 Lane?  
4 A: Close enough.  
5 Q: Okay. An elevation of 25.83 feet?  
6 A: That's correct. I think it's 25.83.  
7 Q: Okay. And so that's going to be the elevation  
8 of the center of the road?  
9 A: Correct.  
10 Q: Okay. And so the houses that are adjoining  
11 that are going to be at least that elevation,  
12 26.83?  
13 A: Correct.  
14 Q: And down here on another part of that same road  
15 right adjacent to Circle Drive, we've also got  
16 the same figure of 25.83 feet for the center of  
17 the road; isn't that correct?  
18 A: That's correct.  
19 Q: And so the houses along the, that will adjoin  
20 the backyards of the other houses on Circle  
21 Drive, those houses will be built at an  
22 elevation of at least 26.83 feet; isn't that  
23 correct?  
24 A: Well, not exactly. As a result of the  
25 particular circumstances in that area of Circle

1 Drive, Horry County, which has the regulation  
2 that requires that minimum building floor  
3 elevation has agreed that those lots can be  
4 waived from that requirement, so they can be  
5 built at the curb elevation.

6 Q: Okay. So they'll be built at ...

7 A: Those elevations that you see.

8 Q: Okay. So they're going to be built at around  
9 25.83?

10 A: Well, what you're looking at in the green is  
11 the high point of the centerline of the road,  
12 so it would be from 25.83 down to about 24.09  
13 in the area that you were just pointing at, and  
14 I'm referring to the ?? finished floor  
15 elevation of the building pads.

16 Q: Okay. And what are the elevations of those  
17 lots in Phase IIB along that area?

18 A: It's not shown on this exhibit, but we have  
19 surveyed some of the yards of some of those  
20 lots as a result of comments from the County,  
21 and I believe it is depicted on our grading  
22 plan which Ms. Shahid had up here just a little  
23 bit ago. I'm not sure which exhibit that is.

24 Q: Okay. They're all lower than these lots that  
25 the new development would have, aren't they?

1 A: I believe they are. Actually, I think there  
2 are some of the shots right up in here that  
3 show the backyards of some of those lots  
4 (indicating).

5 Q: Okay.

6 A: You might be able to read those.

7 Q: Over on the other side near, on Plantation  
8 Drive, the backyard of those lots show  
9 elevations at around maybe 22.3 ranging up to  
10 23 and one 24?

11 A: Okay. It looks like there maybe an elevation  
12 of 26 in there and I see about 25.3 on the end  
13 of this corner lot, and it ranges down to about  
14 a 22 as you go in the direction of the next  
15 intersection.

16 Q: Okay. And ... but all the lots on the other,  
17 along Circle Drive are at lower elevations,  
18 aren't they?

19 A: Lower than?

20 Q: Lower than these lots are going to be in the  
21 proposed new development.

22 A: I believe they are lower.

23 Q: Okay. Now, on this map that we have up here,  
24 the only swale that you show here is running  
25 along the back of these lots; isn't that right?

1 A: There's one in this area on the back of the  
2 other lots.

3 Q: Okay. You're talking about ... but I'm talking  
4 about along the lots that will adjoin the  
5 Circle Drive lots. You're showing a swale  
6 along the backyards of the proposed new  
7 development lots?

8 A: That's correct.

9 Q: Okay. And you don't show swales along any of  
10 the side lot lines here, do you?

11 A: Not on this exhibit, but they're on the ...  
12 they are depicted on the construction plans.

13 Q: Okay. And what's going to be the bottom  
14 elevation of that swale?

15 A: I think they probably all vary in elevation.

16 Q: Okay. Are the bottoms of some of those swales  
17 going to be higher than the lots that are over  
18 on Circle Drive and Phase IIB?

19 A: I'll be happy to look at the plans and ...

20 Q: Well, let's do that.

21 A: Okay.

22 MR. CHANDLER: Where are those plans?

23 MS. SHAHID: It's that folder right there, I believe.

24 A: I think it starts on sheet 11.

25 MS. SHAHID: Mr. Bevins, two sheets fell out when I



1 was removing it, so they might be out of order.

2 A: I think this is the area that you're talking  
3 about.

4 Q: Adjacent to the backyards along Circle Drive.  
5 And what does this show the bottom elevation of  
6 that swale to be?

7 A: At it's high, it looks to be about 20.7 and it  
8 drains to an elevation about 19.6 in the area  
9 behind these three lots. It's a 21.5 at this  
10 location and it drains to a 19.6 at this catch  
11 basin.

12 Q: Okay. And is there going to be a lip on that  
13 swale on the very back side of that, those  
14 lots? Is there going to be a rise?

15 A: No.

16 Q: All right. And do you know what the elevation  
17 of the lots beside that ...

18 MS. SHAHID: For orientation purposes, can I ask  
19 what like lot numbers y'all are referencing?  
20 I'm looking at it from here.

21 THE COURT: Yes, ma'am.

22 A: The first area that I was indicating ran from  
23 the back of lot 98 toward lot 96.

24 MS. SHAHID: Okay.

25 A: The second group ran from lot 94 to lot 95.

1 And I think the next question was to identify  
2 a lot elevation. And it looks like the center  
3 or the lot line between these two lots, which  
4 this lot had a lot number of lot 554 and this  
5 one is lot 555, and it looks like the area  
6 between the lots is about 21.8. This lot,  
7 number 556, at the rear of the property has an  
8 elevation of 21.9.

9 Q: Okay. And ... all right. Thank you. Now, I  
10 mean, there's no question but that between the  
11 Circle Drive lots in existing Phase IIB and the  
12 outfall, we're going to have lots that are  
13 going to be at a higher elevation than their  
14 lots. We're going to have a road at a higher  
15 elevation than their lots. We're going to have  
16 another lot on the other side of the road  
17 that's going to be higher than the Phase IIB  
18 lots. Isn't that correct?

19 A: That's correct.

20 Q: Okay. So everything all along this Ricola Lane  
21 is going to be higher than what's in Phase IIB  
22 right now?

23 A: Correct.

24 Q: And everything on the other side is going to be  
25 higher than them as well?

1 A: That's correct, generally speaking.

2 Q: Okay. And the downstream peak flow elevation  
3 that you took from the LPA study was going to  
4 be at you estimated 22 feet at node 27?

5 A: The number we got from the report that we  
6 looked at, I think is probably here on the  
7 table in front of me, but I believe it was  
8 21.38, and I also mentioned that we use a  
9 slightly higher number of 22 as our water  
10 surface elevation at the tie-in point.

11 Q: Okay. Now, did you prepare the Notice of  
12 Intent for stormwater activities that was filed  
13 with DHEC that's been marked as Petitioner's  
14 Exhibit 3?

15 A: Yes. Our firm prepared that under my  
16 direction.

17 Q: Okay. And it was submitted on behalf of  
18 Deertrack Golf, Incorporated?

19 A: It's been quite a while since I've seen that.  
20 Yes, that's correct.

21 Q: Okay. And Deertrack Golf, Incorporated, is  
22 your understanding is the owner of the property  
23 at this time?

24 A: That is my understanding.

25 Q: And the individual name that's on here for the

1 contact is Mr. Patrick Shaad?

2 A: Yes, that's correct. I didn't recall it that  
3 way, but that's what we put on the form, and we  
4 were probably directed to do that.

5 Q: Okay. And, to your knowledge, has Mr. Patrick  
6 Shaad, the son of Mr. John Shaad has been  
7 mentioned in this hearing?

8 A: I can't say. I just don't know.

9 Q: Okay. But it's the same basic family that  
10 developed what's known as Phase IIB in  
11 Deerfield Plantation?

12 A: That is my understanding. I don't know Patrick  
13 and it's been a long time since we prepared  
14 that, and I'm sure that we got direction from  
15 someone, but I don't know the relationship of  
16 Patrick Shaad to John Shaad.

17 Q: Okay. So to the extent that there are drainage  
18 problems in this area and inefficiencies in the  
19 stormwater system, it's due to the way that  
20 development was done and that was done by the  
21 same people who still own this golf course now?

22 A: As far as I know, yes.

23 Q: Now, on this application, what did you indicate  
24 was the receiving water body?

25 A: It says Dogwood Lake and ultimately the

1 Atlantic Ocean.

2 Q: Okay. Now, what is between this site and  
3 Dogwood Lake?

4 A: There is a ditch, the new pond as has been  
5 discussed here which has been come to be known  
6 as node 27. There's a series of stormwater  
7 pipes that runs from that location to the,  
8 generally to the east or toward the ocean and  
9 then crossing Highway 17 and then connecting to  
10 Lake Elizabeth and Lake Dogwood and then  
11 there's a discharge channel that connects to  
12 the Atlantic Ocean.

13 Q: Okay. Have you ever heard of Lake Elizabeth?

14 A: Yes, I think I just mentioned.

15 Q: Okay. So there's ... Lake Elizabeth is between  
16 Dogwood Lake and Deerfield?

17 A: To be honest, Mr. Chandler, I know that there's  
18 two lakes and one is Dogwood Lake and one is  
19 Lake Elizabeth. I'm not sure which is which.

20 Q: Okay. Were you here this morning when Mr.  
21 Garigen testified?

22 A: Yes, I was.

23 Q: And you would agree with him that there's a  
24 continual flow of water through these various  
25 channels down towards Lake Elizabeth and Lake

1 Dogwood?

2 A: I couldn't testify to that firsthand, but I  
3 have no reason to not believe that.

4 Q: Okay. And in your work, do you ever take a  
5 look at soil maps?

6 A: Yes, I do.

7 Q: Okay. And, in fact, you include information  
8 about soil types out there in your report,  
9 don't you?

10 A: Yes, we do.

11 Q: Okay. And you found Johnson soils out there or  
12 did you just rely on the soils map?

13 A: Well, what we're required to do is look at the  
14 ... again, the SCS, Soil Conservation Service,  
15 publishes a soil survey for the entire land  
16 area of Horry County and it covers this area  
17 and we are ... it is typical that the engineer  
18 would use the information out of these soil  
19 surveys in order to identify the types of soils  
20 in connection with performing these types of  
21 stormwater calculations, and that's what we  
22 did, we used the soil maps for this part of  
23 Deerfield.

24 Q: Now, your report has already got a copy of  
25 that, but just so we can mark it as a separate

1 exhibit, is this a map that's a part of your  
2 report that overlays the proposed subdivision  
3 on a soils map?

4 A: Yes, it is.

5 Q: Okay.

6 MR. CHANDLER: And we've marked this as Petitioner's  
7 Exhibit Number 87. I ask that this be admitted  
8 into evidence, Your Honor.

9 MS. SHAHID: No objection.

10 THE COURT: Without objection, Petitioner's 87  
11 admitted.

12 (Petitioner's Exhibit Number 87 was admitted into  
13 evidence.)

14 Q: Now, I want you to compare that with  
15 Petitioner's Exhibit 11A, which is a map taken  
16 out of the Horry County Soil Survey, and the  
17 Johnston soil indicator on that sheet 11A,  
18 that's the same Johnston soil formation that  
19 you show on your soils map, isn't it?

20 A: Yes, it is. This is the ... this is sheet 90  
21 out of the Horry County Soils Manual as  
22 produced by the U.S. Department of Agriculture  
23 Soil Conservation Service, and it is common for  
24 us to use this collection of soils maps in the  
25 preparation of our stormwater calculations.

1 And what we did in this case was to align, in  
2 the best way possible, align the maps that we  
3 have for the subdivision and superimpose them  
4 on the soils map. And we created this as an  
5 exhibit, but it's our belief that this soils  
6 exhibit called figure four depicts the same  
7 information as the soils map.

8 Q: Okay. And sheet 90 from the soils map shows a  
9 dash and dotted line running up into this  
10 Johnston formation, doesn't it?

11 A: Yes, it does.

12 Q: And what is that?

13 A: Typically it indicates a drainage pattern.

14 Q: Okay. Are you familiar with the term "Waters  
15 of the State"?

16 A: I've heard them mentioned in this courtroom.

17 Q: Okay. But that's the only time you've heard  
18 it mentioned?

19 A: Only with the ... within the context of this  
20 legal matter. Prior to that, no, I was not  
21 familiar with that.

22 Q: Are you familiar with the term "lake"?

23 A: I'm sorry?

24 Q: Are you familiar with the term "lake"?

25 A: Lake? Yes, I am.



1 Q: Okay. Are there lakes on this property?

2 A: Yes.

3 Q: Are there ponds on this property?

4 A: I think we have been referring to them as  
5 ponds, but I generally use the term  
6 interchangeably.

7 Q: There are bodies of water on this property?

8 A: On the Deerfield golf course property, yes.

9 Q: Okay. And they're all connected to this water  
10 that flows down to Lake Elizabeth and Lake  
11 Dogwood?

12 A: Generally I'd say they are.

13 Q: And is there any exception to that, generally,  
14 that they flow down there?

15 A: That's possible.

16 Q: Okay.

17 A: I couldn't identify an exception. It's my  
18 belief that for the most part, the existing  
19 lakes are interconnected and they have an  
20 ability to discharge to the offsite drainage  
21 ditch that we're also using, or also proposing  
22 to use for the connection of our development  
23 stormwater. But I just can't tell you that  
24 every one of those lakes is connected in that  
25 fashion. I believe that most of them are.

1 Q: Okay. And you indicated that you think these  
2 ponds serve as receivers of storm waters from  
3 the golf course and Phase IIB, the subdivision?

4 A: Yes. Generally yes, they do.

5 Q: Okay. Do you know whether any of these ponds  
6 are spring fed?

7 A: No, I don't.

8 Q: You haven't investigated that at all, have you?

9 A: No, I have not.

10 Q: Do you know what hydric soils are?

11 A: In general I do, yes.

12 Q: And you recognize Johnston soils as a hydric  
13 soil basically?

14 A: I would probably want to open the soils manual  
15 and read it before I told someone that, but I  
16 know that there are a collection of, it may be  
17 referred to as a family of soils. I believe  
18 that I'm probably more familiar with Leon as  
19 one of the hydric-type soils. I would probably  
20 want to look Johnston up to be certain.

21 Q: Okay. Well, we've got those pages in evidence.  
22 We can avoid doing that right now. Do you  
23 often work with projects involving wetlands?

24 A: Yes, I do.

25 Q: And do you ever delineate wetlands?

1 A: No. My firm does not perform wetland  
2 delineation. We usually work in concert with  
3 wetland specialists who perform that function,  
4 and I believe on this project it was Milliken  
5 Forestry that was working with us.

6 Q: Okay. How many projects have you worked on in  
7 the last 20 years that involved filling ponds  
8 for residential development?

9 A: There have been a number of them and it has  
10 varied in the amount, and I would say that,  
11 depending on the time, like in 1986, they had  
12 different regulations and the way the wetlands  
13 were handled was under a different set of  
14 guidelines from the Corps of Engineers who has  
15 jurisdiction over wetlands, as I understand it.  
16 But I can't give you a number. In the  
17 Lowcountry where I practice in general, it is  
18 common to encounter a lot of wetlands. I have  
19 been involved in obtaining wetland field  
20 permits for some projects. But most of the  
21 time, we try to minimize it or avoid it.

22 Q: When's the last time you worked on a project  
23 that involved filling in an entire pond or more  
24 than one pond for residential development?

25 A: An entire pond, I can't recall.

1 Q: Okay. More than 20 years ago?

2 A: I just can't recall.

3 Q: Okay. And when's the last time you were  
4 involved in a project that filled in vegetative  
5 wet areas, all those types of areas on a site  
6 for residential development?

7 A: It might take me a few moments to recall one.  
8 I believe that we worked on a project at  
9 Pawleys Island called Pawleys Point and we were  
10 working with a wetland consultant from  
11 Charleston, Ecological Associates, and they  
12 obtained some permits from the Corps of  
13 Engineers to cross some jurisdictional and non-  
14 jurisdictional wetlands as a part of a  
15 condominium-type project. I don't recall the  
16 amount of acreage that was impacted, but I do  
17 recall that we were coordinating with that firm  
18 in order to complete that project waiting on  
19 the field permits.

20 Q: Okay. Pawleys Point?

21 A: I believe that was in 2004.

22 Q: Okay.

23 A: Residential subdivision, we had one on Windsor  
24 Avenue in Georgetown County near Wedgefield.  
25 I would say it was less than a half an acre.

1           It was a residential subdivision. It would  
2           have been in the middle part of 2006, and the  
3           ... I believe that the Corps issued a permit to  
4           impact the wetlands for a road crossing and the  
5           creation, or subdividing of some lots.

6       Q:    Okay. Both of these things involved crossing  
7           of wetlands?

8       A:    That's correct.

9       Q:    Okay. Now, I want to make sure I understood  
10           correctly. When you talked about a watershed  
11           of a little over 1100 acres, did I understand  
12           correctly that 300 acres of that 1100 was areas  
13           downstream of the point that you marked?

14      A:    I don't believe I made that statement.

15      Q:    Now, but it is clear that your model doesn't  
16           address the entire watershed that drains down  
17           to these lakes and goes to the ocean?

18      A:    That's correct.

19      Q:    Okay. It doesn't involve all of the area up,  
20           that would be off to the left of this map south  
21           of this property including the area down at  
22           Tupelo Bay and other areas that are on the  
23           other side of Glenns Bay Road?

24      A:    That's correct. My model and my stormwater  
25           calculations do not address those areas.

1 Q: Okay. And some of those areas have not yet  
2 been developed; isn't that correct?

3 A: I agree with that. I couldn't tell you how  
4 much of it or what properties are undeveloped,  
5 but I'm familiar with that part of the county  
6 and there probably are some undeveloped areas.

7 Q: Okay.

8 A: I actually lived adjacent to Glenns Bay Road  
9 some years ago before I moved to Pawleys  
10 Island, and I would say that most of the area  
11 around Glenns Bay is developed.

12 Q: Now, when you talked about having two outfall  
13 points on your model, I want to make it clear,  
14 both those outfall points ultimately converged  
15 to go to Lake Elizabeth and the ocean, don't  
16 they?

17 A: That's correct.

18 Q: Okay. So both those outfalls are competing for  
19 the same pipe?

20 A: That is correct.

21 Q: Did your firm prepare the surveys of this  
22 property that have been marked into evidence as  
23 Petitioner's Exhibit 8A?

24 A: Yes. This appears to be a ALTA boundary survey  
25 prepared by ETS, that's my firm. It was done

1 by the surveying division of our company, and  
2 it indicates that there's supposed to be ten  
3 sheets. I think there's only four here.

4 Q: Right. And they're sheets, I think, five, six,  
5 seven, and eight here. Now, I think you missed  
6 Mr. Farrell's testimony; is that what you said?

7 A: I did. I was not in the room when he was  
8 testifying.

9 Q: Are you aware of encroachments onto this  
10 Deertrack Golf property by property owners  
11 within Deerfield Phase IIB?

12 A: I am aware of it, but I'm probably unable to  
13 point out where it occurs. I believe it came  
14 up during the course of testimony regarding  
15 some photographs that were introduced. Prior  
16 to that, I had heard it discussed, but I have  
17 not seen it firsthand.

18 Q: Okay. Now, the development plans that you  
19 prepared, do they take into account leaving  
20 those encroachments in place?

21 A: I don't think so.

22 Q: Okay. Now, there's no question but that we're  
23 going to have more stormwater runoff from this  
24 site as a result of this development if it all  
25 goes in; isn't that right?

1 A: There will be more runoff produced. The  
2 stormwater system is designed to limit the  
3 release of it to the same rate as it is now,  
4 but there will be more runoff produced in the  
5 post-development condition.

6 Q: Okay. At the same peak rate specifically,  
7 right?

8 A: That's correct.

9 Q: Okay. But the total quantity that's going to  
10 have to go through that 60-inch pipe is  
11 ultimately going to be a lot more than what's  
12 having to go through there now?

13 A: That's correct.

14 Q: Now, these elevations that you show here for  
15 the roadway, do these represent ... I want to  
16 make sure I understand what you said. Did you  
17 say that you were going to reduce the roadway  
18 elevation back to the original soil elevation?

19 A: I said that initially the design was tying the  
20 proposed road elevations to the existing grade  
21 of the golf areas as they are today, which I  
22 believe has generally been accepted to be  
23 higher than what was originally the ground  
24 elevations in this area prior to the golf  
25 course being constructed. And what I said was



1           that we were going to lower them to be closer  
2           to that original elevation. I didn't say we  
3           were tying to that elevation. It's going to be  
4           slightly higher than that.

5       Q:    Okay. How much higher?

6       A:    There is a set of road construction profiles in  
7           the construction plans that would generally  
8           depict that, but I can't say without reviewing  
9           that.

10      Q:    Okay. How would you figure out what the pre-  
11           golf course elevations in this area were?

12      A:    I would consider the existing elevations of  
13           some of the adjacent property to be close to  
14           that.

15      Q:    Would you do any soil borings?

16      A:    No, I wouldn't.

17      Q:    You wouldn't? Okay. Why not?

18      A:    I don't think that would give me the answer.

19      Q:    You're not a soil scientist, are you?

20      A:    No, sir.

21      Q:    Okay. So you don't know what soil borings can  
22           tell you about the original ground elevation?

23      A:    I would probably want to rely on a geotechnical  
24           study or geotechnical engineer's opinion if we  
25           went that route, but we did not do any soil

1 boring and we don't have ... we don't provide  
2 that service or have that capability.

3 Q: Okay. So when you say you're moving it closer  
4 to the original elevation, you're talking about  
5 you're lowering the roads just a little bit?

6 A: Generally, yes.

7 Q: But you still think it's several feet above the  
8 elevation before that golf course was built?

9 A: That's possible.

10 Q: Now, are you familiar with a section in the  
11 stormwater regulations that talks about doing  
12 work in a live waterway?

13 A: Are you talking about OCRM regulations?

14 Q: Well, I guess they're OCRM regulations now.  
15 The regulations that are codified at regulation  
16 number 72-300 and 301 through however far it  
17 goes.

18 A: I'm aware that OCRM has a ... actually I think  
19 it has a place in there, Notice of Intent  
20 application to identify that, but I couldn't  
21 recite the details of the requirements for you.

22 Q: Okay. Well, let me read you a statement, and  
23 this is from Section 72-307, subsection B and  
24 C ... no, let me back up, B-4. It says, when  
25 work in a live waterway is performed,

1        precautions shall be taken to minimize  
2        encroachment, control sediment transport, and  
3        stabilize the work area to the greatest extent  
4        possible during construction. Have you ever  
5        heard of that regulation before?

6    A:    Yes, but like I said, I wouldn't have been able  
7        to recite it for you.

8    Q:    All right. Do you know what a live waterway  
9        is?

10   A:    I think I could recognize one if I saw it, but  
11        I'm not sure what definition they apply to it  
12        specifically.

13   Q:    Would the ocean be one?

14   A:    I would probably say that it would fit into  
15        some other category that may have some ...  
16        there may be a different set of requirements  
17        pertaining to work in the ocean. I was  
18        thinking more of a stream that has water  
19        flowing with some velocity all the time.

20   Q:    Okay. Kind of like these streams that are  
21        constantly taking water down to the lakes?

22   A:    I was thinking more like the ditch that runs  
23        from Glenns Bay Road down to that node 27.

24   Q:    Okay. Have you ever been out to the ...

25   A:    Or even the Intercoastal Waterway, may be a

1 better example.

2 Q: All right. Have you ever been out to the  
3 Deerfield property and not seen ... and not  
4 seen water flowing through this existing pond  
5 in these areas going down to the discharge  
6 pipe?

7 A: In my visits, it really ... my description of  
8 the areas onsite would be more like it was  
9 standing as opposed to flowing. The ditch with  
10 the orange arrows, I have ... I would say I've  
11 detected some flowing water in that area. But  
12 onsite it has always appeared to me to be more  
13 stagnant or standing.

14 Q: Are you familiar with the general NPDES permit  
15 that was issued along with the stormwater  
16 permit?

17 A: I'm familiar with it in general. I believe  
18 that the permit as it is issued covers a  
19 variety of construction activities, and in  
20 particular, for a project like this, it is the  
21 general permit issued to the State so that they  
22 can issue construction permits that allow the  
23 type of construction that would encompass the  
24 building of a subdivision like what is proposed  
25 here.

1 Q: Okay. Are you familiar with the part of that  
2 general permit that authorizes discharges to  
3 surface waters of the State?

4 A: I'm aware of it being a part of that. I  
5 couldn't recite the details of it.

6 Q: Okay. And you're also not so sure what a  
7 surface water of the state is, are you?

8 A: I'm not. I'm aware of the term. I'm aware of  
9 the term Waters of the U.S. and I will confess  
10 that prior to my involvement with this case, I  
11 didn't recognize that there was a separate,  
12 distinctive identification for something called  
13 the Waters of the State.

14 Q: Okay. Were you aware prior to today that the  
15 word "Waters of the State", "surface Waters of  
16 the State" appear in several places in that  
17 stormwater permit?

18 A: Now, are you talking about the general permit?

19 Q: The NPDES permit.

20 A: I was not aware of that.

21 Q: Okay. And the NPDES permit, you know that  
22 that's the permit that was issued by DHEC for  
23 compliance with the Federal Clean Water Act?

24 A: I'm aware of that, yes.

25 Q: Okay. And that application that you've helped

1 fill out or you filled out on behalf of  
2 Deerfield Golf, it was to apply for that  
3 permit, authorization under that permit, wasn't  
4 it?

5 A: That's correct. They issue a state sediment,  
6 erosion control, and stormwater management  
7 permit along with the ... I think what they do,  
8 if I'm correct, is OCRM in their capacity  
9 through DHEC as having been delegated some  
10 regulations, perhaps from EPA, certifies that  
11 the project complies with the conditions that  
12 allow it to be issued, a permit to proceed  
13 under the general permit that has been issued  
14 in advance to the state for this type of  
15 construction.

16 Q: Okay.

17 A: And we filled out that application to request  
18 those approvals from the OCRM.

19 Q: In fact, as part of that application you're  
20 certifying that your project complies with the  
21 terms of that program; isn't that correct?

22 A: That's correct.

23 Q: Okay. But you're not familiar with the basic  
24 terms of that permit?

25 A: I'm not familiar with the terminology Waters of

1 the State in the sense that I could give you  
2 the definition and point at one and say that  
3 is a member of that classification.

4 Q: Okay. We happen to have a copy of that permit  
5 that's been marked as Petitioner's Exhibit 12.  
6 Have you ever read it?

7 A: I have a copy of it and I have read portions of  
8 it. I can't say that I've read it cover to  
9 cover.

10 Q: Okay. Now, if I understood you correctly, the  
11 reason that you use these computer models, I  
12 believe you said, is that it is the most  
13 convenient way to run these calculations; is  
14 that right?

15 A: That's correct.

16 Q: Okay. And it's the most efficient way to do  
17 it?

18 A: Yes, I'd say that's correct.

19 Q: Okay. And would you agree with me that the  
20 most accurate way to do it is to make sure you  
21 verify it with known events?

22 A: I think that the way that we perform these  
23 calculations is in agreement with the SCS  
24 methodology which is prescribed by the U.S.  
25 government through technical release documents

1       such as TR-55 and TR-20 and it's very specific  
2       and methodical. It's like following a recipe  
3       and we've been doing it that way and submitting  
4       it to the agencies that have jurisdiction over  
5       these matters for as long as I have been doing  
6       this, and it has been accepted widely, and as  
7       far as I know ,all the engineers that work  
8       alongside, and I'm referring to other firms, do  
9       it in essence the same way. We try to make the  
10      information that we put into these models and  
11      into our calculations as accurate as possible,  
12      and we do that by, as I've described before,  
13      collecting information through our field  
14      topographic and location surveys, making site  
15      visits to the properties, trying to make  
16      judgment calls about the features that we're  
17      modeling, such as ditches, pipes, and as I  
18      said, we follow these methodologies that are  
19      prescribed by our government, and they have  
20      been routinely accepted by all the agencies  
21      that we submit them to. They frequently  
22      comment on them and express their judgment and  
23      sometimes makes changes, but in general, I  
24      believe that the stormwater departments that we  
25      submit these calculations to have accepted our



1        calculations the way that we have been  
2        performing them. And that is the approach that  
3        we have taken with all of the projects that  
4        we've perform this work on, including this one.

5        Q:    Okay. If I could summarize what you just said,  
6        is that you've got a cookbook and you always  
7        follow that cookbook and you did it the way the  
8        cookbook says to do it and the way you've  
9        always done it and the way it's always been  
10       accepted, and that's the way you did it in this  
11       case? Is that what you just said?

12       A:    Yes.

13       Q:    Okay. Now, the question I asked you, isn't the  
14       most accurate way to do a model is to go back  
15       and make sure the model matches up with known  
16       flood events?

17       A:    Well, I'm not exactly sure how you do that.  
18       It's not directed by any of the agencies that  
19       have jurisdiction over this type of work, and  
20       I've never been required to do it.

21       Q:    Okay. You haven't been required to do it, so  
22       you hadn't done it; is that right?

23       A:    Yes.

24       Q:    If you could figure out how to do it, it might  
25       make your model a little more accurate,

1           wouldn't it?

2       A:     I believe our model is accurate as it is and I  
3           don't believe that anybody that has reviewed it  
4           has disputed that, including Horry County and  
5           OCRM.     Actually, at one time Steve Powell  
6           didn't dispute it, and I believe that the  
7           engineers at LPA have reviewed our calculations  
8           and not only did they accept their validity,  
9           they incorporated them into their most recent  
10          issue of their stormwater study for the  
11          Caropines and Deerfield watershed study.

12       Q:     Well, it is kind of a circular set of reports,  
13           isn't it?   You used their study and did your  
14          model and then they took your figures from your  
15          model and built them back into their model, and  
16          so we go around in a circle here, don't we?  
17          And so if they didn't get it right in the first  
18          time, the third time isn't going to be right  
19          either, is it?

20       A:     Well, I don't think they got it wrong and I  
21           don't think we got it wrong.

22       Q:     But you don't know because you didn't test it  
23           against a known flood event, did you?

24       A:     We didn't test it against a known flood event.

25       Q:     Okay.

1 A: And we're not required to do that by the  
2 regulations that apply to this type of work.

3 Q: All right. And if it turns out that they did  
4 get it wrong because they didn't field test it,  
5 they didn't verify it with known events, if  
6 they didn't get it right, then all of your  
7 predictions are going to amount to garbage in,  
8 garbage out; isn't that right?

9 A: Well, I don't believe that the work that we've  
10 done is garbage.

11 Q: I know you don't believe that, but if they  
12 didn't get it right, then your numbers are not  
13 going to be right either; isn't that right?

14 A: Well, we are relying on the conclusions that  
15 LPA came up with in their reports, so the  
16 validity of our report is contingent on the  
17 accuracy of the work done by LPA.

18 Q: Okay.

19 A: And I don't think there's any secret about  
20 that. We clearly identify in our, in the text  
21 of our report that we are relying on  
22 information that they provide and that is with  
23 the concurrence and direction of the Horry  
24 County engineers, and I believe we've stated  
25 that all along.

1 Q: Okay. And even you and the Horry County people  
2 know that there still is going to be flooding  
3 in Phase IIB after this is all said and done if  
4 this project is built; isn't that right?

5 A: I believe there will be flooding in Phase IIB  
6 if this project is not built.

7 Q: Okay. But there will be flooding if this  
8 project is built too, won't there?

9 A: I think that the people that live in Phase IIB  
10 will experience less flooding if this project  
11 is constructed.

12 Q: If your model works out?

13 A: If my model is valid and all the other  
14 information that we have used, such as the  
15 field surveys, the information that we've  
16 gotten from the County, and other information  
17 is accurate, I believe that the project will  
18 result as a benefit to the people that live in  
19 Deerfield.

20 Q: Okay. If the County maintains all of the  
21 structures downstream in perfect condition, if  
22 there are not additional inputs to this  
23 watershed to compete for that flow downstream,  
24 if these numbers all work out, then maybe there  
25 will be less flooding in this neighborhood; is

1           that right?

2       A:    Along with the internal stormwater system that  
3           we've designed and that this project, that will  
4           be constructed along with this project. They  
5           also have to maintained. But yes, the County  
6           has a responsibility to maintain that  
7           downstream drainage-way, and if they don't,  
8           then there will be problems upstream. But I  
9           think they have all the equipment, personnel,  
10          and expertise that's necessary to maintain that  
11          waterway, and so far they've been doing that.  
12          And I think they've paid a lot of attention to  
13          this area and they spent a lot of money trying  
14          to improve the drainage situation at this  
15          particular location, as well as other locations  
16          in the county. And Horry County should  
17          probably be applauded for the kind of work that  
18          they do in the Lowcountry areas that are known  
19          to have nuisance flooding that causes this kind  
20          of aggravation to people. They clean out  
21          ditches. They've got crews of men that go  
22          around to areas of the county where people are  
23          complaining, they clean out ditches, they clean  
24          out pipes, they've got a vacuum truck. We work  
25          with these people frequently and we have come

1 to know that they have pursued this kind of  
2 ongoing maintenance. I think the Horry County  
3 Council has ... this is out of my area. You  
4 had Tom Garigen here, he could have talked  
5 about it, but Horry County Council has  
6 committed funds to maintain drainage. I've sat  
7 through many County Council meetings where  
8 people from the public have come and complained  
9 about drainage and I feel like that the County  
10 government has responded in many ways to those  
11 complaints. And I think that the County is  
12 going to respond in this watershed as well.

13 Q: Okay. So if the County keeps doing that,  
14 despite all the financial pressures that the  
15 County is facing, that every level of  
16 government faces right now, if they keep doing  
17 that and if the contractors come in and build  
18 this just right and if this model is right and  
19 if the storms cooperate and follow the rainfall  
20 patterns that the SCS told you to put in them  
21 models, if all of these things happen to  
22 coincide, then we're all going to be very  
23 lucky, aren't we?

24 A: Yes, sir.

25 MR. CHANDLER: No further questions.

1 THE COURT: Ms. Shahid?

2 MS. SHAHID: Yes, sir.

3 MR. BEVINS - REDIRECT EXAMINATION BY MS. SHAHID:

4 Q: You were asked a question on cross-examination.  
5 about the 60-inch pipe that I think we said it  
6 goes under the frontage road, and I think you  
7 acknowledged that while the peak discharge will  
8 not ... from post-development, will not exceed  
9 pre-development, the actual volume of water  
10 post-development will be larger. I think that  
11 was your testimony. Do you recall that?

12 A: Yes.

13 Q: Okay. In your opinion as an engineer, civil  
14 engineer with expertise in stormwater  
15 management, can the 60-inch pipe that's part of  
16 the overall outfall from node 27 leading into  
17 the great big lakes and eventually into the  
18 Atlantic Ocean, can that 60-inch pipe, does it  
19 have the capacity to handle the increase in  
20 volume resulting from post-development  
21 discharge rates?

22 A: I didn't perform any calculations to make that  
23 determination, but I will say that from past  
24 experience it would be possible.

25 Q: Okay. Why is that?

1 A: Depending on the circumstances, the way the  
2 hydraulics work through a pipe, the general  
3 amount of water we're talking about could pass  
4 through that pipe, I would suggest that the  
5 engineers at LPA have actually performed those  
6 calculations and they can probably produce it  
7 and answer that question, and I suspect given  
8 the scrutiny that has been applied to this  
9 location, they probably have and it probably  
10 has been reviewed by the County ...

11 MR. CHANDLER: Your Honor, he's getting ready to  
12 speculate as to what somebody else might say  
13 and I don't believe that that's ...

14 THE COURT: You can give your opinion, but you can't  
15 get over into speculation.

16 A: My opinion is that it's possible for that pipe  
17 at that diameter to carry that volume of water,  
18 but I repeat, I have not performed any  
19 calculations on it.

20 Q: Okay. Thank you. Now, I'm going to show you  
21 the Notice of Intent ...

22 MS. SHAHID: What exhibit number is that for the  
23 Petitioners?

24 Q: Three, which was put into evidence as  
25 Petitioner's Exhibit 3. I'm going to show you



1 a copy I have. And there's a section at the  
2 bottom of the page that asks the applicant to  
3 determine whether, or to advise the agency  
4 whether or not there's Waters of the United  
5 States, Waters of the State located on the  
6 site. Do you see that?

7 A: Yes, I do.

8 Q: Okay. Let me take that from you because that's  
9 the only copy I have. And I think I heard you  
10 testify that you brought in Milliken Forestry  
11 Company to perform that assessment for you,  
12 correct?

13 A: That's correct.

14 Q: Okay. And did the Milliken Forestry ... does  
15 OCRM require that you provide information from  
16 the Corps of Engineers regarding whether or not  
17 there's Waters of the United States or wetlands  
18 on your site?

19 A: Yes, they do.

20 Q: Okay.

21 A: They usually require us to obtain a, what's  
22 typically and commonly referred to as a wetland  
23 certification letter.

24 Q: Okay. And did ...

25 A: I'm sorry, from the Corps.

1 Q: Did Mr. Boatwright of Milliken Forestry Company  
2 obtain that letter for you?

3 MR. CHANDLER: I object, Your Honor. There's an  
4 order on a Motion in Limine prohibiting the  
5 parties from introducing evidence on the  
6 question of what the Corps of Engineers did or  
7 did not do about Waters of the United States.

8 MS. SHAHID: That really wasn't my intent, Your  
9 Honor. My intent was to show that he provided  
10 the information that OCRM requires him to  
11 provide. That when he checked this section of  
12 the form, that he then provided the necessary  
13 information from OCRM. I'm certainly not  
14 offering the letter as proof on that particular  
15 issue.

16 THE COURT: All right. I think what she's  
17 suggesting is permissible.

18 MS. SHAHID: Okay.

19 THE COURT: Overruled.

20 Q: I'm going to show you a letter written to Mr.  
21 Boatwright, which I have marked Respondent  
22 Deertrack's Exhibit Number 5 and ask if you  
23 recognize that letter?

24 MR. CHANDLER: Your Honor, I know what this letter  
25 is, and I think this letter crosses that line.

1 THE COURT: She said she's not going to introduce it  
2 in evidence. If all he does is says that he  
3 provided the information, I don't feel that  
4 transgresses the order.

5 MR. CHANDLER: We'll see what the questions are. I  
6 understand.

7 A: So proceed?

8 Q: Yes, sir.

9 THE COURT: What question did you ask him, did he  
10 provide the information that's sought there?

11 Q: Is that the information that accompanied the  
12 application?

13 A: Yes.

14 Q: Okay. And you actually attached a copy of this  
15 letter to the application?

16 A: That's correct.

17 Q: Okay. Mr. Chandler indicated and described  
18 some areas in this vicinity of the project,  
19 called them areas, and that these areas, asked  
20 whether or not they had flowing water in them.  
21 The areas that he was indicating, are those  
22 ditches? Did I hear you say those are ditches?

23 A: Yes.

24 Q: Okay. And is it helpful to you as a  
25 professional engineer to obtain a photograph of

1 a known flood event or a rain event that caused  
2 flooding that depicts a watermark on the wall?  
3 Can you use that photograph in any capacity to  
4 help you with the work that you do in terms of  
5 creating a stormwater model?

6 A: Only in the sense that it would let me know  
7 that there is a flooding or a nuisance flooding  
8 problem in a particular area, but it generally  
9 doesn't give us anything to add to our  
10 analysis.

11 Q: Okay.

12 A: If that's what you mean by that.

13 Q: Okay. And you came into this project knowing  
14 that there was a nuisance flooding problem in  
15 the area?

16 A: That's correct.

17 Q: Okay.

18 MS. SHAHID: That's I'll I've got, Your Honor.

19 MR. BARNETT: I just have a couple, Your Honor.

20 MR. BEVINS - CROSS-EXAMINATION BY MR. BARNETT:

21 Q: Mr. Chandler asked you about Waters of the  
22 State. You are familiar with the pond down  
23 here. I think it's been referred to as the  
24 pond by the bowling alley, the Caropines, node  
25 27?

1 A: Yes, I think that building is the old Bi-Lo  
2 grocery store.

3 Q: Okay. And I believe I heard you testify and  
4 Mr. Garigen testify that there was a pond there  
5 in front of that big box that has the screens  
6 on it. There was a pond there before it was  
7 enlarged by the County. Is that right?

8 A: Actually, there was a pond a little closer to  
9 Deerfield that's still there, and then there's  
10 a new pond on a piece of land that the County  
11 purchased, and I believe that Mr. Garigen  
12 mentioned that in his testimony today. So  
13 there's actually ... and I believe very close  
14 together and directly connected, they probably  
15 and, you know, in my opinion, function as one.  
16 But you can almost say that the one that was  
17 there has been enlarged. But I would say that  
18 ... my interpretation of that is that it's now  
19 all that node 27 pond.

20 Q: All right. So what they did is they enlarged?

21 A: That's how I would describe it.

22 Q: Okay. You may or may not know, do you know  
23 whether the County, Horry County, is subject to  
24 the same state stormwater regulations and NPDES  
25 regulations as everyone else? Do they have to

1 get the same kind of permits; do you know?

2 A: That's a very good question, but as far as I  
3 know, there is no exclusion for them. If they  
4 perform a function that brings about land  
5 disturbance, as far as I know, they must get a  
6 permit, and it's entirely possible that they  
7 are now a delegated agency performing review  
8 function for OCRM. I believe it is commonly  
9 referred to as MS-4, and Horry County is taking  
10 a position as operating MS-4 for most of Horry  
11 County. I don't know if that gives them any  
12 other authority.

13 Q: That's fine. Let me ask you this. How many  
14 stormwater, state stormwater permits have you  
15 been involved in getting?

16 A: I would have been pleased to develop a  
17 inventory of them prior to coming here today.  
18 I couldn't give you an accurate number, but I  
19 would say since I've been doing this work, and  
20 the regulations have changed several times, but  
21 I applied for and obtained hundreds. I would  
22 say 600, 700.

23 Q: In the last ten years, how many projects? I'm  
24 not looking for a specific number, but just  
25 ballpark it. How many of those type projects

1 had an alteration of drainage ditches?

2 A: That's very common. I would say 100.

3 Q: Okay. Has OCRM ever, ever asked you to do  
4 anything different with respect to one of your  
5 stormwater plans involving the alteration of a  
6 drainage ditch because they said that drainage  
7 ditch was a Water of the State?

8 A: I can't say that it hasn't occurred, but I  
9 can't recall an instance. Maybe a couple of  
10 times.

11 Q: What about a pond, a stormwater pond like on  
12 the golf course?

13 A: And what about it?

14 Q: Have you ever been asked to do something  
15 different with your drainage plan because OCRM  
16 said a stormwater pond on a golf course was a  
17 Water of the State?

18 A: It's possible.

19 Q: You don't recall any instances?

20 A: I can't recall. Generally speaking, in working  
21 with the developer and the other consultants on  
22 a project like you're describing, they would  
23 try to avoid, just as a practical matter, they  
24 would try to avoid it if it was a wetland and  
25 sometimes ...

1 Q: I didn't say wetland. I said a Water of the  
2 State?

3 A: Oh, Water of the State. It's had ...

4 Q: OCRM ...

5 A: I have to tell you, a Water of the State is a  
6 difficult concept for me.

7 Q: Is that a new, a relatively new term for you in  
8 stormwater permitting?

9 A: I'm afraid it is. I'm familiar with Waters of  
10 the U.S. and jurisdictional wetlands and I can  
11 even discuss non-jurisdictional wetlands, but  
12 Waters of the State eludes me as far as being  
13 able to recite ...

14 Q: I think you misheard me before. What I'm  
15 asking you is, has OCRM ever asked you to do  
16 something different with a stormwater plan  
17 because a ditch or pond they said was a Water  
18 of the State?

19 A: I can't recall having to deal with that.

20 Q: Okay. Thank you.

21 THE COURT: Any cross?

22 MR. BEVINS - RECROSS-EXAMINATION BY MR. CHANDLER:

23 Q: Mr. Bevins, on the form that's been marked as  
24 Petitioner's Exhibit Number 3, this is your  
25 signature on the second page of it?



1 A: That's correct.

2 Q: And you certified that it's in compliance with  
3 the terms and conditions of SCR-100000, which  
4 is the general NPDES permit?

5 A: That's correct.

6 Q: And on the front of this form there's the  
7 question asked, are there any Waters of the  
8 U.S./State on this and you checked the box no.

9 A: That's correct.

10 Q: Okay. At the time you checked that box and  
11 signed this form, did you know what a Water of  
12 the State was?

13 A: No.

14 Q: Okay. Now, this thing asked whether or not  
15 there are any intermittent streams on this  
16 property, and you checked the box no.

17 A: That is correct.

18 Q: Do you know what an intermittent stream is?

19 A: I think I would know it if I saw it.

20 Q: Okay. And do you know what an ephemeral stream  
21 is?

22 A: I believe that is a stream that has water in it  
23 part of the time during the course of the year.

24 Q: Okay. And you checked the box no?

25 A: (Nods head affirmatively.)

1 Q: Okay. Now, on this map that's up here that we  
2 colored in and marked as Petitioner's Exhibit  
3 10, do you recognize where that map came from?

4 A: It looks like ... it doesn't have a title. I  
5 cannot tell you that I know where it came from.

6 Q: Okay. But generally it looks like one that  
7 your firm prepared, doesn't it?

8 A: It could be.

9 Q: Okay.

10 A: I mean, it's lacking a title block identifying  
11 it. I mean, it could have been produced by  
12 another firm as well.

13 Q: That's fine.

14 MR. CHANDLER: Beg the Court's indulgence.

15 Q: Do you recognize this drawing?

16 A: Yes, it's ... it looks like ... it looks like  
17 a plan that we produced.

18 Q: And is Petitioner's Exhibit 10 essentially an  
19 enlarged portion of that sheet?

20 A: That's what it looks like, yes.

21 Q: So Petitioner's Exhibit 10 is basically just a  
22 portion of one of the sheets your company  
23 prepared?

24 A: Yes.

25 Q: With the addition of a little bit of coloring

1           here?

2       A:    I mean ... yes.   I mean, it's been modified and  
3           altered, but it looks like the base of it is  
4           part of this map.

5       Q:    And everywhere on here that it described ...  
6           mentions the word pond, that was something that  
7           was placed on this by the nomenclature by your  
8           company?

9       A:    That's correct, as a result of a field survey.

10      Q:    Okay.   This form that's Petitioner's Exhibit 3  
11           also asks if there are any non-jurisdictional  
12           wetlands, and you also checked no.

13      A:    That's correct.

14      Q:    And the certification you got that you  
15           submitted to OCRM doesn't address non-  
16           jurisdictional wetlands, does it?

17      A:    I don't think it specifically calls out non-  
18           jurisdictional wetlands in the certification  
19           statement. But I think it is a part of that  
20           wetland identification portion that might be  
21           item number four.

22      Q:    Okay.   Yeah, I'm talking about down here, 4A,  
23           right?

24      A:    Yes.

25      Q:    Okay.       They asked a question about

1 jurisdictional wetlands and non-jurisdictional  
2 wetlands, and you said no.

3 A: That's correct.

4 Q: And no waters of the state, no intermittent  
5 streams, no ephemeral streams, although you're  
6 really not clear what is a Water of the State?

7 A: That's correct.

8 MR. CHANDLER: That's all, Your Honor.

9 MS. SHAHID: Nothing further, Your Honor.

10 MR. BARNETT: Nothing from me, Your Honor.

11 THE COURT: You may step down, sir. You want to take  
12 Ms. Dieck's witness now.

13 MS. DIECK: Can we take a brief break if that would  
14 be okay?

15 THE COURT: Ten minutes.

16 (Break from 3:31 p.m. until 3:41 p.m.)

17 MS. DIECK: Well, Your Honor, there's sort of a new  
18 development. I think we're just going to allow  
19 our deposition transcript to stand and just  
20 move forward with the case and allow that to be  
21 the Department's testimony.

22 THE COURT: Who is the deposition?

23 MS. SHAHID: Shannon Hicks. It was previously  
24 admitted.

25 THE COURT: It was admitted.

BOARD:  
Elizabeth M. Hagood  
Chairman

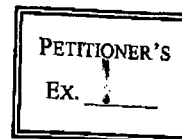
Edwin H. Cooper, III  
Vice Chairman

Steven G. Kisner  
Secretary



C. Earl Hunter, Commissioner

*Promoting and protecting the health of the public and the environment*



BOARD:  
Henry C. Scott

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Glenn A. McCall

Coleman F. Buckhouse, MD

February 29, 2008

PATRICK SHAAD  
DEERTRACK GOLF INC  
150 MAJOR REYNOLDS PL  
KNOXVILLE TN 37919

RE: OLD SOUTH COURSE, PHASE 1, Horry County  
File number: 26-07-04-13

Dear Jeffrey Farrell:

The Department of Health and Environmental Control (Department or DHEC) has reviewed and approved the Stormwater Pollution Prevention Plan (SWPPP) for the referenced project on February 29, 2008. Based on your submission of the Notice of Intent (NOI) and in accordance with the NPDES General Permit for Storm Water Discharges from Large and Small Construction Activities SCR100000 (2006 CGP), this project has been granted coverage under the 2006 CGP. This project's general permit coverage number is SCR10G097. The total disturbed area for this site is 53.5 acres. This NPDES coverage expires on 02/28/2013, 5 years from the date of issuance.

See attached DHEC Office of Ocean and Coastal Resource Management (DHEC-OCRM) certification approved 02/15/2008 for additional conditions related to the Coastal Zone Consistency determination.

Because this project or larger common plan for development disturbs 10 or more acres, monthly reports must be submitted to the Department for the above-referenced site. Please refer to SCR100000, mainly Section 3.10, for information about requirements for inspections and monthly reporting. Your first monthly report is due on or before April 28, 2008.

Because this project or larger common plan for development disturbs 10 or more acres, a pre-construction meeting must be held onsite with all co-permittees and contractors who are not co-permittees (contractors) prior to that co-permittee or contractor performing construction related work intended to disturb soils at the above-referenced site. Please refer to SCR100000, mainly Section 3.2, for information about requirements for pre-construction meetings and certification of those meetings.

An as-built survey, signed and sealed by a S.C. Licensed Land Surveyor, should be submitted for the 17 pond(s) on this site. The survey(s) should show grades, contours, and depths for all ponds and should include the elevations and dimensions of all outlet structures, including but not limited to pipes, orifices, risers, weirs, and emergency spillways. A statement signed by the project's S.C. Registered Engineer indicating that the pond(s) was installed and is operating as shown on approved plans and in approved calculations is required. If the elevations or dimensions of the structures listed above do not match those used in the approved plans, provide a certification statement signed by the project's S.C. Registered Engineer indicating that the pond, as built, will function as shown in approved calculations. A new analysis of the pond (routing)

may be necessary. The as-built survey and/ or analysis must be accepted by the Department before a Notice of Termination (NOT) can be submitted.

Because this project is part of a larger common plan for development or sale (LCP), all applications for future land-disturbing activities that are part of this LCP (phases, outparcels, etc.) should include the above-referenced file number (26-07-04-13), NPDES coverage number (SCR10G097), and project name (OLD SOUTH COURSE).

The inspections for this site must be performed by qualified personnel who meets the requirements list in Section 3.10.D of the 2006 CGP. Qualified personnel must be one of the following:

1. SWPPP preparer
2. Person under direct supervision of SWPPP preparer
3. Person who has been certified through a Construction Site Inspector Certification Course that has been approved by DHEC (see our website for a list of approved courses)
4. Person with registration equivalent of SWPPP preparer
5. Person under direct supervision of person with registration equivalent to SWPPP preparer

The 2006 CGP can be downloaded at the following website:

<http://www.scdhec.gov/environment/water/docs/finalcgp.pdf> or you may request a copy from us via email ([stormwatercgp@dhec.sc.gov](mailto:stormwatercgp@dhec.sc.gov)). You are responsible for ensuring your contractor(s) complies with the approved SWPPP and the minimum requirements of the 2006 CGP. Also, you are responsible for overall compliance with the Storm Water Management and Sediment Reduction Act of 1991 (1991 Act) and the Federal Clean Water Act (CWA).

You must notify this DHEC-OCRM Office prior to starting any land-disturbing activity. The address and telephone number of the DHEC-OCRM office are as follows:

S.C. DHEC-OCRM  
927 SHINE AVE  
MYRTLE BEACH SC 29577  
843-238-4528

You should be aware that this approval is only applicable for the SWPPP that was submitted for this project. Any additional construction or land disturbing activity beyond the scope of the approved plans is not authorized. Any future work for this project not shown on the stamped, approved plans will require that you submit another site plan for review and approval. All major modifications require review and approval by the Department. Minor modifications to the approved SWPPP may be made by the SWPPP preparer and do not require review and approval by the Department; these changes should be signed and dated by the SWPPP preparer. If you have a question about whether a modification is major or minor, contact the DHEC-OCRM at (843) 238-4528.

A copy of the stamped, approved SWPPP (including a copy the 2006 CGP and signed co-permittee and contractor certifications), NOI, and CGP coverage letter from DHEC must be retained at the construction site (or accessible within 30 minutes during normal business hours) from the date of commencement of construction

activities to the date of final stabilization. A copy of the stamped, approved SWPPP must be available at a central location on-site for the use of all those identified as having responsibilities under the SWPPP whenever they are on the construction site. If an on-site location is unavailable to store the SWPPP when no personnel are present, notice of the plan's location must be posted near the main entrance at the construction site.

All contractors who will conduct land-disturbing activities at the site must sign a certification statement as a co-permittee or as a contractor who is not a co-permittee. You are responsible for any contractor who is not a permittee. You are also responsible for listing all contractors in the SWPPP and for holding a pre-construction conference with each co-permittee and contractor who is not a co-permittee before they can conduct land-disturbing activity at the site.

The Department may conduct periodic inspections of your site. Any violations found during these inspections may result in enforcement action. Failure to comply with the approved SWPPP or the minimum requirements of the 2006 CGP, 1991 Act, or CWA may subject you to applicable penalties.

This NPDES coverage should be terminated by the permittee when one of the conditions listed in Section 5.1 of the 2006 CGP has been met. You must submit a Notice of Termination (NOT) to cancel your NPDES coverage under the 2006 CGP. Please see section 5.1 of the 2006 CGP for more information about termination of coverage.

You are responsible for obtaining any other federal, state, or local permit that may be required for this project. Please note we have not sent a copy of this letter to any county or city building official. You must send a copy of this letter to these agencies, if necessary.

Please see the enclosed "Notice of Appeal Procedure" document for information about the procedures for appealing this NPDES coverage. Also, see the enclosed document from the S.C. DHEC Compliance Assurance Division detailing some of the compliance requirements of the 2006 CGP.

If you have any questions or cannot access the referenced websites, please call Tara C Maddock at 843-953-0243.

Sincerely,

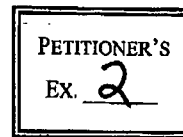


Jill C. Stewart, P.E., Manager  
Stormwater Permitting Section

CC: Thomas P Bevins-ENGINEERING AND TECHNICAL SERVICES INC  
Tara C Maddock-Charleston OCRM Office  
Region 6, Myrtle Beach EQC Office  
Jeffrey Farrell, Bill Clark Homes of MB  
Will Weaver, Bill Clark Homes of MB  
Don Trainor (Via Certified Mail)  
Leo Bereths (Via Certified Mail)  
Tony Greco (Via Certified Mail)

Charles Budnick (Via Certified Mail)  
Michael Taylor (Via Certified Mail)  
Grover Perry (Via Certified Mail)  
Cathy Mason (Via Certified Mail)  
Douglas Williams (Via Certified Mail)  
Eric Watson (Via Certified Mail)  
Steven and Joey Brads (Via Certified Mail)  
Anthony DiGulelo (Via Certified Mail)  
Frank Yelinko (Via Certified Mail)  
Jenny Burns (Via Certified Mail)  
John Barclay (Via Certified Mail)  
Ed Booth (Via Certified Mail)





C. Earl Hunter, Commissioner

*Promoting and protecting the health of the public and the environment.*

February 29, 2008

SCDHEC-EQC, Bureau of Water  
Storm Water Division  
2600 Bull Street  
Columbia, SC 29201

Re: Old South Course, Phase 1  
Horry County  
EFIS # - 58619  
Permit # - SCR10G097  
DHEC Internal Departmental Certification

Storm Water Division:

This letter shall act as the DHEC-OCRM Coastal Zone certification for the above referenced proposed project, as per the plans approved February 15, 2008. This project also meets the minimum standards and criteria of South Carolina Regulation 72-300 and SCR100000.

- (a) Included with the engineer's copy of this certification is an initiation of construction notice to be completed and returned to the appropriate OCRM staff person. Once this initiation of construction notice is received by OCRM, a construction placard will be issued. This placard must be placed in a conspicuous place at the construction site. No work can commence until the placard is posted.
- (b) The responsible day-to-day contact must have an OCRM stamped set of plans on site at all times.
- (c) The person responsible for maintenance shall perform or cause to be performed preventive maintenance of all completed storm water management practices to ensure proper functioning. OCRM may conduct periodic maintenance inspections.
- (d) This certification is only applicable for the plans that were submitted and approved for this project.
- (e) This Coastal Zone Consistency Certification is not intended to authorize any direct or indirect impacts to any freshwater wetlands. Any unauthorized direct or indirect impacts to freshwater wetlands shall be considered a violation of this certification, and are subject to enforcement and possibly fines.
- (f) No Critical Areas as determined by OCRM shall be disturbed or altered without authorization by the Department.

Deertrack Golf, Inc.  
OCRM - 0007

**SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL**

**Ocean and Coastal Resource Management**

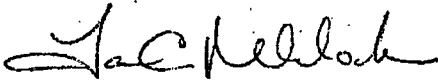
Charleston Office • 1362 McMillan Avenue, Suite 400 • Charleston, SC 29405

Phone: 843-953-0200 • Fax: 843-953-0201 • [www.scdhec.gov](http://www.scdhec.gov)

**000473**

(g) If unanticipated cultural materials (i.e., large, intact artifacts or animal bones; large clusters of artifacts or animal bones; large soil stains or patterns of soil stains; buried brick or stone structures; clusters of brick or stone) or human skeletal remains are discovered on the property during land altering or construction activities, then the property owner will temporarily halt those activities and immediately notify the OCRM and the State Historic Preservation Office (SHPO) of the late discoveries. A reasonable 50 to 100 foot buffer shall be immediately established around the cultural materials by the construction project manager. The buffer will be flagged by appropriate personnel. All project personnel will be notified by the property owner. No land altering activities will be allowed within this buffer zone until the course of action herein described has been established. The halt will afford the OCRM and the SHPO the opportunity to assess the situation and recommend a course of action within two (2) business days of such notification. Should a course of action not be recommended within two (2) business days then land disturbance activities may proceed.

Sincerely,



Tara C. Maddock  
Project Manager

Deertrack Golf, Inc.  
OCRM - 0008



# Notice of Intent (NOI) for Stormwater Discharges from Large and Small Construction Activities, NPDES General Permit SCR100000

**For official use only**File number: 26-07-04-13 / 58619Permit number: SCR10 6097 / 40125Submittal package complete: 4/30Public Notice Start Date (OCRM only): 5/4/07**For official use only**

S.C. Department of Health & Environmental Control  
Office of Ocean & Coastal Resource Management  
**APPROVED FOR CONSTRUCTION ONLY**

Approved by: J. ChelakCertification Issued Date: 2/15/08NPDES Issued Date: 2/29/08NPDES Coverage #: SCR106097

Submission of an NOI constitutes notice that the entity identified in Section I intends to be authorized under SCR100000. Instructions on page 4.

Date: 04 / 24 / 2007Project/ Site Name: Old South Course - Phase I County: HorryDo you want this project to be considered for the Expedited Permitting Program (EPP)? ☐ Yes ☒ No (See instructions.)**I. Project Information**Project Owner/ Operator (Company or person): Deertrack Golf, Inc.Permit Contact (if owner is company): Mr. Patrick Shaad Company EIN: \_\_\_\_\_Mailing Address: 150 Major Reynolds Place City: Knoxville State: TN Zip: 37919Phone: (Day) (865) 637-2674 (Mobile) \_\_\_\_\_ (Fax) \_\_\_\_\_

Email address (optional): \_\_\_\_\_

**II. Property Information**A. Site Location (street address, nearest intersection, etc.): off of Platt Blvd., Deerfield CommunityCity/ Town (if in limits): \_\_\_\_\_ Latitude: 33° 37' 00" N Longitude: -78° 59' 00" WTax map # (list all): 191-00-01-068

B. Property Owner (if different from section I above): \_\_\_\_\_

Mailing Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: (Day) \_\_\_\_\_

**III. Site Information**A. Disturbed area (to the nearest tenth of an acre): 53.5 Total area: 84.6B. Is this project part of a Larger Common Plan for Development or Sale (LCP)? ☒ Yes ☐ No

If yes, what is the previous state permit number? \_\_\_\_\_ Previous NPDES number: SCR10 \_\_\_\_\_

LCP/ Overall Development Name: Old South CourseC. Start Date (MM/DD/YYYY): 04 / 01 / 2007 Completion Date: 05 / 01 / 2008D. Is this site located on Indian Lands? ☐ Yes ☒ No If yes, name of reservation: \_\_\_\_\_

E. Type of Activity (check all that apply):

☐ Commercial ☒ Residential: Single-family ☐ Linear (Roads, utility lines, etc.) ☐ Other: \_\_\_\_\_☐ Institutional ☐ Residential: Multi-family ☐ Site Preparation (No new impervious) \_\_\_\_\_F. Are there any flooding problems downstream or adjacent to this site? ☒ Yes ☐ NoG. Is this NOI being submitted in response to a Notice to Comply issued by S.C. DHEC? ☐ Yes ☒ NoH. Is any part of the property located inside an MS4 or urbanized area? ☒ Yes ☐ NoIf yes, list the MS4 operator or urbanized area name: Myrtle Beach**IV. Waterbody Information**A. Nearest receiving waterbody(s): Dogwood Lake Distance to this waterbody (feet): 1,500Next/Nearest named receiving waterbody(s): Atlantic Ocean**B. Wetlands/ Waters of the State**

|                                | On the site?                                                        | If yes, delineated/identified?                                      | Impacts?                                                            | Amount of impacts |
|--------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------|-------------------|
| 1. Waters of the U.S. / State  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | ____ Ac ____ Feet |
| a. Perennial stream(s)         | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | ____ Ac ____ Feet |
| b. Intermittent stream(s)      | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | ____ Ac ____ Feet |
| c. Ephemeral stream(s)         | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | ____ Ac ____ Feet |
| d. Jurisdictional wetlands     | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | ____ Ac ____ Feet |
| e. Non-jurisdictional wetlands | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | ____ Ac ____ Feet |
| f. Other (List):               | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | ____ Ac ____ Feet |

2. If yes for impacts in item B.1, has a USACOE permit been applied for or obtained for those impacts?  
☐ Yes ☐ No ☒ N/A If yes, list the permit/ application number: \_\_\_\_\_

### C. Impaired Waterbodies

Do stormwater (SW) discharges from the site drain to a watershed that drains to a DHEC WQ monitoring site (WQMS)...

1. Listed on the most current 303(d) List for Impaired Waters? ☐ Yes ☒ No
  - a. If yes for (1), is there an unimpaired WQMS between your site and the impaired WQMS? ☐ Yes ☐ No
  - b. If no for (a), list the waterbody, \_\_\_\_\_ List the impairment(s), \_\_\_\_\_
  - c. Will construction SW discharges from your site contain the pollutant(s) of impairment? ☐ Yes ☐ No
  - d. If yes for (c), will use of the selected BMPs ensure that the site's discharges will not contribute to or cause further water quality standard violations? ☐ Yes ☐ No
2. For which a TMDL(s) has been developed? ☐ Yes ☒ No
  - a. If yes for (2), list the waterbody, \_\_\_\_\_ List the impairment(s), \_\_\_\_\_
  - b. Has the standard been attained for the impairment(s)? ☐ Yes ☐ No
  - c. If no for (b), will construction SW discharges from your site contain the pollutant of impairment?  
☐ Yes ☐ No
  - d. If yes for (c), are your discharges consistent with the assumptions and requirements of the TMDL(s)?  
☐ Yes ☐ No
  - e. If no for (d), will use of the selected BMPs ensure that the site's discharges will not contribute to or cause further water quality standard violations? ☐ Yes ☐ No

- D. Are S.C. Navigable Waters (SCNW) on the site? ☐ Yes ☒ No If yes, list the SCNW: \_\_\_\_\_  
Will any construction activities cross over or occur in, under, or through the SCNW? ☐ Yes ☐ No  
If yes, then describe activity (e.g., road crossing, sub aqueous utility line), \_\_\_\_\_  
Has an SCNW permit been issued for this site? ☐ Yes, for all activities ☐ Yes, for some activities ☐ No  
If yes, list permit number and corresponding activities, \_\_\_\_\_

### V. Operator Information

- A. SWPPP Preparer: Thomas P. Bevins, P.E. S.C. Registration #: 13899  
Company/Firm: Engineering & Technical Services, Inc. S.C. COA #: 0439  
Mailing Address: Post Office Box 2040 City: Pawleys Island State: SC Zip: 29585  
Phone: (Day) (843) 237-3002 (Mobile) (843) 385-8882 (Fax) (843) 237-2269  
Email address (optional): tbevins@etsengineers.com
- B. Operator of Day-to-Day Site Activities [ODSA] (Company or person): Bill Clark Homes of MB  
Site Contact (if ODSA is company): Will Weaver  
Mailing Address: 600 North Azalea Dr., Suite 5 City: Surfside Beach State: SC Zip: 29575  
Phone: (Day) (843) 293-8440 (Mobile) \_\_\_\_\_ (Fax) (843) 839-1593

### VI. Signatures and Certifications

- A. One copy of the SWPPP, all specifications and supporting calculations, forms, and reports are herewith submitted and made a part of this application. I have placed my signature and seal on the design documents submitted signifying that I accept responsibility for the design of the system. Further, I certify to the best of my knowledge and belief that the design is consistent with the requirements of Title 48, Chapter 14 of the Code of Laws of SC, 1976 as amended, pursuant to Regulation 72-300 et seq., and in accordance with the terms and conditions of SCR100000. (This should be person identified in Section V.A.)  
Please check one. ☒ Engineer ☐ Tier 8 Land Surveyor ☐ Landscape Architect

Thomas P. Bevins, P.E.

Printed name of SWPPP Preparer

Signature of SWPPP Preparer

13899

S.C. Registration #

- B. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I hereby certify that all land-disturbing construction and associated activity pertaining to this site shall be accomplished pursuant to and in keeping with the terms and conditions of the approved plans and SCR100000. I also certify that a responsible person will be assigned to the project for day-to-day control. I hereby grant authorization to the Department of Health and Environmental Control and/or the local implementing agency the right of access to the site at all times for the purpose of on site inspections during the course of construction and to perform maintenance inspections following the completion of the land-disturbing activity. (See Section 122.22 of S.C. Reg. 61-9 for signatory authority information.)

Jeffrey Farrell

Printed name of Project Owner/Operator

Signature of Project Owner/Operator

Area Manager

Title/ Position

**S.C. Stormwater Management & Sediment Reduction Permitting  
and S.C. Coastal Zone Management Program (SCCZMP) Consistency Determination  
SCDHEC - Office of Ocean and Coastal Resource Management**

**Project Name:** OLD SOUTH COURSE PHASE I  
**Project Location:** Off of Platt Boulevard, within the Deerfield Community, on the former Deerfield Gold Course, Surfside Beach, Horry County, SC  
**CZMP Map printed:** \_\_\_\_\_

**Consistency Determination:**

- A. Project Consistent with:**  
 SCCZMP Yes S.C. Stormwater Management & Reduction Act Sediment Yes
- B. Project Consistent with (After Revisions):**  
 SCCZMP ✓ S.C. Stormwater Management & Sediment Reduction Act ✓
- C. Project Inconsistent with:**  
 SCCZMP \_\_\_\_\_ S.C. Stormwater Management & Reduction Act Sediment \_\_\_\_\_

**1. Brief Project Description and Purpose:**

- Single Family Residential Development
- Multi - Family Residential Development
- Commercial Development
- Mixed Use
- Institutional / Linear / Site Preparation / Other \_\_\_\_\_

**2. Brief Description of Stormwater Management & Sediment Reduction System(s):**

- Construction Entrance, Silt Fence, Inlet Protection
- Sedimentation Pond(s) ✓ 17
- Exfiltration System / Other: \_\_\_\_\_

**3. Summary of Public and Agency Comments (if none, so indicate):**

Deertrack Golf, Inc.  
OCRM - 0012

**A. None Received**

**B. 1 - Commenter:** see attached document/index

**2 - Date of Comment:** Main comments flooding in existing

**3 - Comment Summary:** subdivision, adequate drainage not being provided currently, homes 000477 flooded high water table, loss of golf course,

4. Stormwater Management and Sediment Reduction Assessment:

A. Does the project meet the minimum requirements of the S.C. Stormwater Management & Sediment Reduction Act (if no, explain why not)? YES

B. Does this project require NPDES general permit coverage? YES / COVERED / NO

C. Is a Stormwater Master Plan required & if so has one been submitted? YES / NO

5. S.C. Coastal Zone Management Program (SCCZMP) Assessment:

A. Does the project impact any SCCZMP defined resources, including GAPC's (if so describe)? NO / YES

NO

NO - W/ archeo, endangered species or other

B. Does the project meet Wetland Master Planning Policies (explain)? YES / N/A

N/A - none

C. Is a dock master plan required (if so, why)? NO / YES

NO

D. Is a critical area permit required (if so, describe)? NO / YES

NO - not adjacent

6. Conclusions: Describe how coastal resource impacts, if any, are being addressed. If the project is inconsistent list (A) specific requirements of the S.C. Stormwater Management and Sediment Reduction Act not met, (B) specific S.C. Coastal Zone Management Program policies not met, (C) project modifications for bringing the project into consistency.

7. Consistency Approved by: William L. Kregloe Shall Date: 2/15/08

8. Plan Review by: William L. Kregloe Shall Date: 2/29/08

9. Notes: \_\_\_\_\_

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