

North Carolina Department of Environment and Natural Resources

Beverly Eaves Perdue Governor Division of Water Quality Coleen H. Sullins Director

Dee Freeman Secretary

July 2, 2009

Mr. Don Nickell The Cliffs Communities 3598 Highway 11 Travelers Rest, SC, 29690

Re:

The Cliffs at High Carolina, Buncombe County

DWQ Project # 20080880; USACE Action ID. No. 200701619

Ut to Swanannoa River [040302,6-7-8, C]; Ut to Licklog Branch [040302,6-7-8, C];

Ut to Flat Branch [040302,6-7-8, C]; Rocky Fork [040302, 6-57-4, C, TR];

Ut to Ellison Branch [040302, 6-57-4, C, TR]; Ut to Cane Creek [040302, 6-57-4, C, TR]

APPROVAL of 401 Water Quality Certification with Additional Conditions

Dear Mr. Nickell:

Attached hereto is a copy of Certification No.3804 issued to The Cliffs at High Carolina, dated July 2 2009. In addition, you should get any other federal, state or local permits before you go ahead with your project including (but not limited to) Solid Waste, Sediment and Erosion Control, Stormwater, Dam Safety, Non-discharge and Water Supply Watershed regulations.

If we can be of further assistance, do not hesitate to contact us.

CHS/cbk/jeh

Attachments: Certificate of Completion

NC DWQ 401 WQC Summary of Permitted Impacts and Mitigation Requirements

cc:

Roger Edwards, DWQ Asheville Regional Office Liz Hair, USACE Asheville Regulatory Field Office

Matt Matthews, Surface Water Section Chief Jay Zimmerman, DWQ Raleigh Regional Office Cyndi Karoly, Wetlands and Stormwater Branch John Hennessy, Wetlands and Stormwater Branch

Gray Hauser, Division of Land Resources

Jennifer Robertson, WNR, PO Box 882, Canton, NC, 28716

Shannon Deaton, NC Wildlife Resources Commission

401 Oversight/Express Review Permitting Unit 1650 Mail Service Center, Raleigh, North Carolina 27699-1650 Location: 2321 Crabtree Blvd., Raleigh, North Carolina 27604 Phone: 919-733-1786 \ FAX: 919-733-6893 Internet: http://h2o.enr.state.nc.us/ncwetlands/

NorthCarolina
Naturally

The Cliffs at High Carolina Page 2 of 15 July 2, 2009

Dave McHenry, NC Wildlife Resources Commission
David Gantt, Buncombe County Commissioner, 82 Church St., Asheville, NC, 28801
Nathan Ramsey, Chairman, Buncombe County Commissioners,
60 Court Plaza, Asheville, NC, 28801
Austin Gerken, Southern Environmental Law Center,
29 N. Market St., Suite 604, Asheville, NC, 28801
File Copy
Interested Parties from DWQ Public Hearing of November 18, 2008

NORTH CAROLINA 401 WATER QUALITY CERTIFICATION

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Quality (DWQ) Regulations in 15 NCAC 2H, Section .0500 to The Cliffs at High Carolina to fill 0.223 acres wetlands acre of 404 jurisdictional wetlands, 0.03 acre of open water, and 3337 linear feet of streams in the French Broad River Basin, to construct a residential subdivision, golf course, and associated infrastructure at the Cliffs at High Carolina development. The site is located off Patton Cove Road near Swannanoa in Buncombe County, North Carolina, pursuant to a permit application received by the DWQ on May 28, 2008, advertised by Public Notice issued by the US Army Corps of Engineers on July 3, 2008, and as described in additional correspondence received by the DWQ on July 3, 2008, September 15, 2008, October 31, 2008, November 20, 2008, December 29, 2008, January 8, 2009, February 17, 2009, and May 12, 2009. Impacts to s Sites 26, 36, and a portion of Site 37 located on the golf course section of the project are not included in this authorization.

The application and supporting documentation provides adequate assurance that the proposed work will not result in a violation of applicable Water Quality Standards and discharge guidelines. Therefore, the State of North Carolina certifies that this activity will not violate the applicable portions of Sections 301, 302, 303, 306, 307 of PL 92-500 and PL 95-217 if conducted in accordance with the application, the supporting documentation, and conditions hereinafter set forth.

This approval is only valid for the purpose and design submitted in the application materials and as described in the Public Notice. If the project is changed, prior to notification a new application for a new Certification is required. If the property is sold, the new owner must be given a copy of the Certification and approval letter and is thereby responsible for complying with all conditions of this Certification. Any new owner must notify the Division and request the Certification be issued in their name. Should wetland or stream fill be requested in the future, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). If any plan revisions from the approved site plan result in a change in stream or wetland impact or an increase in impervious surfaces, the DWQ shall be notified in writing and a new application for 401 Certification may be required. For this approval to be valid, compliance with the conditions listed below is required.

Conditions of Certification:

Sediment & Erosion Control Measures

- 1. Appropriate sediment and erosion control practices in order to assure compliance with the appropriate turbidity water quality standard of 10 NTUs must be implemented:
 - a) The approval for the stream impacts is contingent upon the approval by the Division of Land Resources to disturb trout buffers. If the Division of Land Resources does not issue an approval to disturb trout buffers, then impacts to those streams (including but not limited to stream relocations) within the protected trout buffers shall not be allowed. If the Division of Land Resources allows some buffers to be disturbed but not others, then only the streams with in the buffers approved for disturbance by the Division of Land Resources and approved for impact by this certification may be impacted.

- b) For all streams classified as Trout Waters, the trout waters turbidity standard of 10 NTUs must be adhered to at all times. If the back ground turbidity is greater than 10 NTUs, background turbidity must be documented and there shall be no increase in turbidity from the activity of 10 NTUs above the documented background. As part of the requirements to comply with the turbidity standard the following practices at a minimum must be implemented (Other practices in addition to those listed here may be necessary to comply with the turbidity standard and, if needed must be implemented by the applicant. Any additional practices applied involving chemical treatment not specifically noted in this Certification should be submitted for review and approval to DWQ and thereafter implemented in accordance with DWQ's approval).
- c) The Division of Land Resources' Design Standards in Sensitive Watersheds (15A NCAC 04B .0124) must be adhered to throughout the life of this project. Erosion and sedimentation control measures must be designed following the practice standards and specifications in the most recent version of the *Erosion and Sedimentation Control Planning and Design Manual* and Design Standards in Sensitive Watersheds (15A NCAC 04B .0124)
 - i) Surface area of temporary sedimentation traps and basins shall be based on the peak runoff from the 25-year storm and 435 square feet of surface area shall be provided for each cubic foot per second of peak runoff into the basin
 - ii) Sediment storage volume of temporary sedimentation traps and basins shall be a minimum of 3600 cubic feet per disturbed acre or the product of the surface area and minimum depth requirement, whichever is greater
 - Temporary sedimentation basins shall dewater from the surface, except that temporary sedimentation traps with a stone spillway may be used in drainage areas of less than one (1) acres.
 - iv) Additional measures such as chemical flocculation or sand filters shall be used to prevent a violation of the water quality standard for turbidity
 - v) The applicant is required to immediately notify the Division of Water Quality Asheville Regional Office of any waivers granted by the Division of Land Resources to the 20 acre maximum clearing limit specified in the aforementioned regulations.
- d) Ground cover is established as specified below
 - i) Staff must be identified and trained to conduct the above maintenance and inspection activities. Additionally, the crew must maintain inspection logs that must be posted onsite in a specified location for review by DENR staff to ensure that the above requirements at a minimum are being met.
 - ii) In clear areas where grading has been completed, ground cover (temporary or permanent) shall be established within seven (7) days of completion of clearing and within 24 hours of completion of grading. However, if the grading is continuous and has not been completed within 7 days of clearing, then the ground cover (temporary or permanent) shall be established within 2 calendar days of the completion of the grading. All seed bed preparation, seeding and mulching shall be conducted according to the erosion and sedimentation control plan approved by the Division of Land Resources or the appropriate delegated program. Approved rolled erosion control products based on the manufacturer's specifications or similar covers shall be used on all slopes. Approved matting based on the manufacturer's specifically approved for this project by the Division of Land Resources or the appropriate delegated

program shall be used for all road shoulders and ditches. In areas where straw is applied, it must be applied at a rate and in a manner approved by the Division of Land Quality or the appropriate delegated program Sod may be used in lieu of the above ground covers, provided that the installation of the sod begins within 24 hours of the completion of grading. During the placement of sod, sod shall first be placed around storm drain inlets and perimeter of the cleared area. The applicant shall make all reasonable efforts to assure survival of groundcover vegetation.

- iii) All disturbed surfaces within 50 feet of a stream shall be covered within 24 hours of the completion of clearing.
- iv) Concentrated discharges into filter strips or protected buffers shall be made to flow in a diffuse manner through out the entire filter strip or buffer. This may be achieved using level spreaders on slopes of less than 6% or, on steeper slopes, by using hand dug contour berms overlain with erosion control fabric at intervals of 10 feet perpendicular to the flow. Both ends of each berm, shall be turned up slope for a distance necessary to cover one vertical foot of contour to prevent bypasses.
- v) Construction must be conducted in phases according to the erosion and sediment control plans approved by the Division of Land Resources. Except for stockpiles, each phase shall be completely stabilized before construction can begin in the next phase. When any material is added to or removed from a stockpile, it must be covered or stabilized within 24 hours.
- vi) All materials required for stabilization of each phase shall be on site before land disturbance within that phase begins. Materials required for stabilization of each phase shall be on site prior to such time that such materials are needed. Variation from this condition is allowed if authorized in the trout buffer variance issued by the Division of Land Resources.
- vi) A monitoring plan for stability of the remaining streams and wetlands downstream of the project site to the property boundary must be approved in writing by this Office before any of the impacts approved in this certification occur. If the streams and/or wetlands develop indications of instability, including but not limited to stream bed aggradation or degradation and/or stream bank erosion or failure, as determined by the Division of Water Quality then a remedial action plan must be developed within 90 days of the determination. The remedial action plan must be approved in writing by this office and implemented within 90 days of the receipt of the written approval.
- viii) A tree removal plan must be provided for written approval from this office before any of the impacts approved in this Certification are conducted. The plan must include a process to identify and remove trees along streams at fairway crossings. The goals are to maintain adequate vegetation in order to maintain the temperature standard and to prevent damage to the streams from dropping trees.
 - ix) In-stream turbidity control measures other than sediment basins and traps such as PAM mats are allowed if required by the Division of Land Resources.

- x) No land-disturbing activity shall be undertaken within a buffer zone adjacent to designated trout waters that will cause adverse temperature fluctuations, as set forth in 15A NCAC 2B .0211 "Fresh Surface Water Classification and Standards", in these waters.
- xi) Permanent stormwater management practices shall be provided to prevent thermal pollution following the design guidance in the Urban Waterways Fact Sheet "Stormwater BMPs for Trout Waters" (AGW-588-10) by Matthew P. Jones and William F. Hunt, Ph.D., North Carolina Cooperative Extension Service, NCSU.
- xii) During construction, the applicant or its duly authorized agent(s) shall report to DWQ upon experiencing a rainfall event in excess of one inch in a 24 hour period and a release of sediment from the construction into any stream.
- 2. Unless more protective requirements are otherwise specified in this certification, erosion and sediment control practices must meet all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards:
 - a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*.
 - b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
 - c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
 - d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.

3. No Sediment and Erosion Control Measures in Wetlands

Sediment and erosion control measures should not be placed in wetlands or waters without prior approval by the Division. If placement of sediment and erosion control devices in wetlands and waters is unavoidable, design and placement of temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or stream beds or banks, adjacent to or upstream and down stream of the above structures. All sediment and erosion control devices shall be removed and the natural grade restored within two (2) months of the date that the Division of Land Resources or locally delegated program has released the project.

Impacts Authorized

4. The following impacts are hereby approved as long as all of the other specific and general conditions of this Certification are met. No other impacts are approved including impacts at Sites 26, 36, and a portion of Site 37 located on the golf course section of the project as well as incidental impacts. Impacts to the stream at Site 36 is allowed for the construction of a bridge to allow for construction of a golf cart path along hole number 7.

Table of Authorized Impacts for Cliffs of High Carolina

Authorized Wetlands Impacts

Impact Site	Authorized Impact (acres)	Subtotal (acres)	
Road Crossings			
Site 16a	0.135		
Site 63	0.004		
Subtotal		0.139	
Golf Course			
Site 31	0.008		
Site 32	0.014		
Site 33	0.027		
Site 34	0.024		
Site 38	0.011		
Subtotal		0.084	
Total		0.223	

Authorized Streams Impacts

Impact Site	Authorized Permanent Impact (linear feet)	Authorized Temporary Impact (linear feet)	Total Authorized Impact (linear feet)	
Road Crossings				
Site 3	59*	40	40	
Site 5	80	10	90	
Site 8	80	10	90	
Site 12b	20	10	30	
Site 13	80	10	90	
Site 13b	40	10	50	
Site 16	80	10	90	
Site 17	50	10	60	
Site 19	80	10	90	
Site 20	80	10	90	
Site 20b	20	0	20	
Site 21	80	10	90	
Site 21b	20	0	20	
Site 22	20	10	30	
Site 23	80	10	90	
Site 23b	80	10	90	
Site 24	80	10	90	
Site 25	80	10	90	
Site 25b	40	0	40	
Site 25c	80	10	90	
Subtotal	1170	200	1370	
Golf Course				
Site 27	211	0	211	
Site 28	375	0	375	
Site 29	234	0	234	
Site 30	171	0	171	
Site 35	122	0	122	
Site 37	854	0	854	
Site 39	0	. 0	0	
Site 40	0	0	0	
Subtotal			1967	
Total			3337	

^{*} Impact approved in 401 WQC in 2008 not included in totals

Authorized Impacts to Other Waters

Impact Site	Authorized Permanent Impact (acres)	
Site 41	0.03	

5. Temporary Fills

All temporary fill and culverts shall be removed and the impacted area returned to the original grade, including each stream's original cross sectional dimensions, planform pattern, and longitudinal bed and bed profile after construction is complete or within 6 months of the establishment of the crossing, which ever is sooner, and the various sites shall be stabilized with natural woody vegetation (except for the maintenance areas of permanent utility crossings) and restored to prevent erosion. If the crossings are not completely removed and restored as described above within the specified time above, additional written approval from this Office must be obtained to modify this condition.

Mitigation of Impacts

6. Mitigation

Compensatory mitigation for impacts 3337 linear feet of streams shall be provided as described below. This certification authorizes construction of the mitigation site titled "Restoration Plan Shoal Falls Farm Restoration Site, Henderson County, North Carolina". The supplemental data (morphologic tables) submitted in your June 17, 2009 email supersedes the information submitted in the original plan. All other information submitted in the original plan is approved by this certification. The credits generated at this site and authorized for use by this certification are described in the table below. Any additional mitigation credits for wetlands or streams shall be authorized for use to offset impacts in another 401 Water Quality Certification.

On-Site Stream Mitigation

Mitigation for impacts to 716 linear feet of streams shall be provided onsite as described in the table below. Per your supplemental application titled, "The Cliffs of High Carolina, DWQ Response to Request for More Information, April 30, 2009", compensatory mitigation for impacts to jurisdictional streams shall be provided as described in the table below. The specific streams and buffers that apply toward this mitigation shall be those identified in your application.

Conservation Easement

A signed conservation easement for all the preserved streams located on the site shall be submitted to the Division of Water Quality for approval. After the conservation easement is approved by the Division of Water Quality, the applicant shall place the appropriate deed notifications or similar mechanisms to ensure that the conservation easement is enforced in the future. These mechanisms shall be put in place prior to impacting any wetlands, waters and/or buffers approved for impact under this Certification. A sample deed notification can be downloaded from the 401/Wetlands Unit web site at http://h2o.enr.state.nc.us/ncwetlands. The text of the sample deed notification may be modified as appropriate to suit to this project.

Off Site Stream Mitigation

Mitigation for impacts to 2621 linear feet of streams shall be provided offsite as described in the table below. This certification authorizes construction of the Shoals Farm Mitigation site. The site shall be constructed as described in your application. Minor alterations to channel pattern, dimension, and profile and buffer plantings are permitted during construction to accommodate unforeseen site specific conditions that are discovered during construction of the site. Should changes to the design exceed what DWQ considers to be minor, then the applicant and/or its hired contactors may be subject to all compliance actions necessary to rectify the unauthorized actions, including potential civil penalty assessments.

Mitigation Site	Actual Linear Feet of Streams	Type of Mitigation	Ratio	Stream Mitigation Units (to offset impacts)	Total
Onsite Mitigation					
Restoration	534	Restoration	1:1	534	
Enhancement I	30	Enhancement I	1.5:1	20	
Enhancement II	404	Enhancement II	2.5:1	162	
Subtotal Onsite Mitigation					716
Offsite					
Shoals Farm Road Site (Crab Creek)	2276	Restoration	1:1	2276	
Shoals Farm Road Site (Shoal Creek Reach 2)	324	Preservation	5:1	65	
Shoals Farm Road Site (Shoal Creek Reach 3)	375	Enhancement	1.5:1	250	
Shoals Farm Road Site (Shoal Creek Reach 4)	45	Enhancement	1.5:1	30	
Subtotal Offsite					2621
Mitigation					
Total					3337

Trout Protections

7. <u>Trout Moratorium</u>

In stream work and land disturbance within the 25-foot buffer zone are prohibited during the trout-spawning season of October 15 through April 15 to protect the egg and fry stages of trout from sedimentation

8. Trout Monitoring

The applicant shall develop a plan for monitoring the brook trout populations for all the streams located upstream of the pond (Lake Tsuga) located on the golf course. The plan shall be submitted to the DWQ and the NC Wildlife Resources Commission no more than 90 days after the effective date of this 401 Water Quality Certification. After DWQ approves the plan, it shall be implemented. The plan shall include, but not necessarily be limited to, an annual in stream sampling protocol to determine if the streams are supporting the native brook trout populations, a comprehensive instream macroinvertebrate sampling regime, and a proposed remediation plan if the in stream sampling indicates that native brook trout populations are no longer present. The report shall be submitted on an annual basis to the Division of Water Quality in conjunction with all other monitoring requirements of this certification. In the event that the streams cease to support the native brook trout populations and the proposed remediation plan fails to restore the brook trout populations to the site, the applicant shall undertake all necessary actions, as approved by DWQ and in consultation with WRC, to restore the native brook trout populations.

Culvert Installation & Monitoring

- 9. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual (http://www.ncdot.org/doh/operations/BMP_manual/download/BMP_Manual.pdf) such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water.
- 10. Placement of culverts and other structures in waters, streams, and wetlands must be placed below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. Culverts required for this project shall be installed in such a manner that the original stream profiles are not altered. Existing stream dimensions (including the cross section dimensions, pattern, and longitudinal profile) must be maintained above and below locations of each culvert. Culverts shall be designed and installed to allow for aquatic life movement as well as to prevent head cutting of the streams. If any of the existing pipes are or become perched, the appropriate stream grade shall be re-established or, if the pipes installed in a perched manner, the pipes shall be removed and re-installed correctly.
- 11. For all streams located upstream of Lake Tsuga, the applicant shall establish a photographic monitoring protocol to ensure that no streambank destabilization occurs downstream of all approved stream impacts and stream crossings. The protocol shall be submitted to, and approved by DWQ, before any impacts to streams occur. The protocol shall include, but not necessarily be limited to photographs of the streams and streambanks for the referenced areas in their preconstruction and post construction state. The frequency of monitoring shall be once every six months. The collected data shall be submitted to DWQ annually no later than December 31st. After initiation of project impacts, photographs of all the required areas shall be provided to DWQ to prove that streambank destabilization is not occurring in these areas. If streambank destabilization is occurring, then the applicant is required to report the problem to DWQ and develop a plan for approval by DWQ to immediately stabilize the impacted streambanks. No streambank stabilization shall occur without DWQ approval. The establishment of native, woody vegetation and other soft stream bank stabilization techniques must be used where practicable instead of rip rap or other bank hardening methods. If rip-rap is necessary, it shall not be placed in the stream bed, unless specifically approved by the Division of Water Quality.

Site Specific Conditions

12. Final Construction Drawings

Two copies of the final construction drawings shall be furnished to NCDWQ prior to the preconstruction meeting. Written verification shall be provided that the final construction drawings comply with the attached permit drawings contained in the Application dated May 28, 2008, advertised by Public Notice issued by the US Army Corps of Engineers on July 3, 2008, and as described in additional correspondence received by the DWQ on July 3, 2008, September 15, 2008, October 31, 2008, November 20, 2008, December 29, 2008, January 8, 2009, February 17, 2009, and May 12, 2009.

13. Certificate of Completion

Upon completion of all work approved within the 401 Water Quality Certification, and any subsequent modifications, the applicant is required to return the attached certificate of completion to the 401/Wetlands Unit, North Carolina Division of Water Quality, 1650 Mail Service Center, Raleigh, NC, 27699-1650.

14. Construction Stormwater Permit NCG010000

Upon the approval of an Erosion and Sedimentation Control Plan issued by the Division of Land Resources (DLR) or a DLR delegated local erosion and sedimentation control program, an NPDES General stormwater permit (NCG010000) administered by DWQ is automatically issued to the project. This General Permit allows stormwater to be discharged during land disturbing construction activities as stipulated by conditions in the permit. Full compliance with permit conditions including the sedimentation control plan, self-monitoring, record keeping and reporting requirements are required. A copy of this permit and monitoring report forms may be found at http://h2o.enr.state.nc.us/su/Forms Documents.htm

15. Notification of Work & Preconstruction Coordination

DWQ's Asheville Regional Office shall be notified in writing at least two (2) days before any impacts to jurisdictional waters or wetlands occurs on site. In addition, prior to incurring any impacts to streams or wetlands, the applicant shall conduct a preconstruction meeting with DWQ staff to review all the conditions of the 401 Water Quality Certifications to ensure that no misunderstanding of each parties rights, responsibilities, or requirements.

16. No Impacts Beyond those in Application

No waste, spoil, solids, or fill of any kind shall occur in wetlands, waters, or riparian areas beyond the footprint of the impacts as approved by this Certification. All construction activities, including the design, installation, operation, and maintenance of sediment and erosion control Best Management. Practices, shall be performed so that no violations of state water quality standards, statutes, or rules occur.

17. Protective Fencing

The outside buffer, wetland or water boundary and along the construction corridor within these boundaries approved under this authorization shall be clearly marked with orange warning fencing (or similar high visibility material) for the areas that have been approved to infringe within the buffer, wetland or water prior to any land disturbing activities.

18. Continuing Compliance

The Cliffs at High Carolina shall conduct construction activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with section 303(d) of the Clean Water Act) and any other appropriate requirements of State law and federal law. If the Division determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, the Division may re-evaluate and modify this Certification to include conditions appropriate to assure compliance with such standards and requirements in accordance with 15A NCAC 2H.0507(d). Before modifying the Certification, the Division shall notify The Cliffs at High Carolina and the US Army Corps of Engineers, provide public notice in accordance with 15A NCAC 2H.0503 and provide opportunity for public hearing in accordance with 15A NCAC 2H.0504. Any new or revised conditions shall be provided to The Cliffs at High Carolina in writing, shall be provided to the United States Army Corps of Engineers for reference in any Permit issued pursuant to Section 404 of the Clean Water Act, and shall also become conditions of the 404 Permit for the project.

19. For all waters classified as trout waters, the trout waters turbidity standard of 10 NTUs must be adhered to at all times. If the back ground turbidity is greater than 10 NTUs, background turbidity must be documented and there shall be no increase in turbidity from the activity of 10 NTUs above the documented background. As part of the requirements to comply with the turbidity standard the

following practices at a minimum must be implemented (Other practices in addition to those listed here may be necessary to comply with the turbidity standard and, if needed must be implemented by the applicant. Any additional practices applied involving chemical treatment not specifically noted in this Certification should be submitted for review and approval to DWQ and thereafter implemented in accordance with DWQ's approval.).

- 20. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills.
- 21. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S., or protected riparian buffers.
- 22. Heavy equipment shall be operated from the banks rather than in the stream channel in order to minimize sedimentation and reduce the introduction of other pollutants into the stream.
- 23. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials.
- 24. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification.
- 25. A copy of this Water Quality Certification and all subsequent modifications, if any, shall be maintained on site at the construction site at all times. In addition, the Water Quality Certification and all subsequent modifications, if any, shall be maintained by the on-site project manager.
- 26. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization shall be clearly marked by highly visible fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification.
- 27. The applicant shall report any violations of this certification to the Division of Water Quality within 24 hours of discovery.

28. Performance/Surety Bond

The applicant shall provide a surety bond (or equivalent instrument) in favor of the State of North Carolina, executed by a surety approved by the Commissioner of Insurance. In consultation with DWQ, the applicant shall ensure that the amount of the bond will cover all necessary costs to stabilize the site to prevent any erosion or sedimentation impacts to waters of the state. In addition, the bond shall require any and all corrective actions be undertaken to ensure site stability is maintained for a period of 3 years from the date of listed insolvency or cessation of work on the site. This bond shall be provided within ninety days of receipt of the Certification, must be continuous in nature, and must bind to the applicant and/or any other owners of the property as well as their heirs and successors. The bond shall be conditioned upon the faithful performance of the requirements set forth in this condition. Upon filing the bond with the Department, the applicant and/or any other owners of the property and any subsequent successors or heirs shall lose all right, title, and interest in the bond while the bond is held by the Department. The bond shall be maintained until the site construction is completed and permanently stabilized and approved in writing by the Division unless released via written notification from the Division. In no event shall the liability to the surety exceed the amount of the surety bond required by this Condition. Notification shall be given upon completion of compliance or acceptance by the Division of a substitute bond. This bond shall remain in force until canceled by the surety. Cancellation by the surety shall be effectuated only upon 60 days written notice thereof to the Division

and to the operator. If the surety bond is canceled, then the applicant and/or any other owners of the property as well as their heirs and successors shall provide a new surety bond within ninety days of the cancelation that also meets the same requirements as previously described in this Condition. If that new surety bond is not issued in this time frame, then this Certification is null and void. This surety bond may be terminated by the State of North Carolina upon an affirmative showing that the improvements and the monitoring have been successfully accomplished. This Certification is only effective once the required performance/surety bond is in place.

Monitoring

29. Surface Water Monitoring

Monitoring of surface water quality shall be conducted through the collection of surface water samples during the months of March and September of each year at the following locations:

- At the bridge crossing downstream of the confluence of the streams located North of Fairway #6 and South of the #6 Tees
- Within 50 feet upstream of Lake Tsuga at the where the northern tributary enters the lake
- Within 50 feet downstream of the confluence of the streams located North and West of the Practice Range
- At the bridge crossing located East of Lake Tsuga and between the No. 9 Tees
- At the outfall from Lake Tsuga

Surface water samples must initially be collected prior to beginning construction of the golf course and prior to the initial application of fertilizers, herbicides, pesticides or fungicides on the course. All surface water samples shall be analyzed for the following parameters:

- Nitrate Nitrogen
- Ammonia Nitrogen
- Herbicides, Pesticides and Fungicides as specified in Table 1 of the report titled,
 "Geologic/Hydrogeologic Assessment, The Cliffs At High Carolina, Swannanoa, North Carolina", dated April 20, 2009

The report shall contain the results of each monitoring event, shall describe any changes to water quality since the last sampling event and historical trends, and provide specific recommendations for corrective action, in the event the water quality becomes impaired. In the event any constituents are detected in the surface water sample results, additional samples may be required and shall be collected as specified by the Division's Asheville Regional Office, to include the collection of groundwater samples. In the event any compounds specified above are changed, the required analysis of surface waters shall be amended to include the new compounds.

30. Turbidity Monitoring

To ensure protection of the existing uses in the streams located upstream of the pond, the applicant shall develop and implement a turbidity monitoring protocol for use during construction of the golf course. The monitoring plan shall be developed and submitted to, and approved by DWQ, prior to any impacts occurring on the project site. If at any time during construction, the turbidity monitoring reveals a violation has occurred, then all grading activities shall cease and actions to stabilize the site shall immediately commence. Grading activities shall recommence only after the site has been stabilized.

31. Monitoring Annual Report

The purpose of this condition is to consolidate the various monitoring requirements. A single monitoring report shall be submitted to the Division of Water Quality. The report shall be due January 5th of the beginning of each year. It shall encompass data for all the monitoring requirements that occurred for the prior calendar year. It is recognized that the total period of monitoring required will be different for each monitoring plan. An as example, the turbidity monitoring plan will cease to be necessary at some time after the construction of the project is complete. As another example, the Stream bank Stabilization Monitoring Plan and the Surface Water Monitoring Plan may continue for sometime after the construction phase of the project is complete. Thus, each plan shall have included in it a mechanism for requesting the cessation of the monitoring requirement from DWQ. The Annual Report shall include the following main monitoring report sections and shall be required until such time that all monitoring requirements have been fulfilled and DWQ has authorized cessation of the required monitoring:

- 1) Construction Turbidity Monitoring Plan (Condition 30)
- 2) Annual Trout Monitoring Plan (Condition 8)
- 3) Streambank Stabilization Plan (Condition 11)
- 4) Surface Water Monitoring Plan (Condition 29)

Finally, when each monitoring plan is submitted for approval to DWQ, in addition to any requirements specified in the condition of this certification that requires the monitoring plan, each plan shall include at a minimum:

- a) a specified timeframe for data collection
- b) proposed methods for data collection
- c) a proposed mechanism for correcting any observed water quality degradation of impacts to existing uses
- d) the requirement that all necessary corrective actions to correct observed impacts to water quality and subsequent existing uses will be undertaken,
- e) a proposed mechanism for requesting cessation of monitoring from DWQ

Also, this approval to proceed with your proposed impacts or to conduct impacts to waters as depicted in your application shall expire upon expiration of the 404 Permit.

If this Certification is unacceptable to you, you have the right to an adjudicatory hearing upon written request within sixty (60) days following receipt of this Certification. This request must be in the form of a written petition conforming to Chapter 150B of the North Carolina General Statutes and filed with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699-6714. If modifications are made to an original Certification, you have the right to an adjudicatory hearing on the modifications upon written request within sixty (60) days following receipt of the Certification. Unless such demands are made, this Certification shall be final and binding.

This the 2nd day of July 2009 DIVISION OF WATER QUALITY

Caloon Culling

CHS/cbk

Individual 401 Certification No. 3804