

**PROJECT SPECIAL PROVISION**

(10-18-95)

Z-1

**PERMITS**

The Contractor's attention is directed to the following permits, which have been issued to the Department of Transportation by the authority granting the permit.

<b><u>PERMIT</u></b>	<b><u>AUTHORITY GRANTING THE PERMIT</u></b>
Stormwater	Division of Environmental and Natural Resources, DENR, State of North Carolina
TVA	Tennessee Valley Authority

The Contractor shall comply with all applicable permit conditions during construction of this project. Those conditions marked by \* are the responsibility of the department and the Contractor has no responsibility in accomplishing those conditions.

Agents of the permitting authority will periodically inspect the project for adherence to the permits.

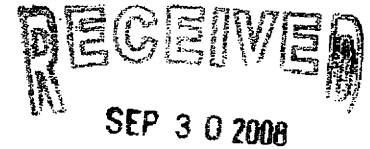
The Contractor's attention is also directed to Articles 107-10 and 107-14 of the *Standard Specifications* and the following:

Should the Contractor propose to utilize construction methods (such as temporary structures or fill in waters and/or wetlands for haul roads, work platforms, cofferdams, etc.) not specifically identified in the permit (individual, general, or nationwide) authorizing the project it shall be the Contractor's responsibility to coordinate with the Engineer to determine what, if any, additional permit action is required. The Contractor shall also be responsible for initiating the request for the authorization of such construction method by the permitting agency. The request shall be submitted through the Engineer. The Contractor shall not utilize the construction method until it is approved by the permitting agency. The request normally takes approximately 60 days to process; however, no extensions of time or additional compensation will be granted for delays resulting from the Contractor's request for approval of construction methods not specifically identified in the permit.

**Where construction moratoriums are contained in a permit condition which restricts the Contractor's activities to certain times of the year, those moratoriums will apply only to the portions of the work taking place in the waters or wetlands provided that activities outside those areas is done in such a manner as to not affect the waters or wetlands.**



September 23, 2008



D.R. Henderson, P.E.  
NCDOT Hydraulics  
1548 Mail Service Center  
Raleigh, NC 27699-1548

Subject: Permit No. SW4080703  
Replacement of Bridge No. 321 over Watauga River, B-4318  
Other Stormwater Permit  
Linear Public Road / Bridge Project  
Watauga County

DIVISION OF THE STATE  
HYDRAULICS UNIT

Dear Mr. Henderson:

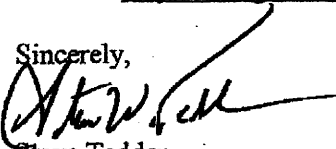
The Winston-Salem Regional Office received a complete Stormwater Management Permit Application for the Replacement of Bridge No. 321 over Watauga River (B-4318) on July 16, 2008. Staff review of the plans and specifications has determined that the project, as proposed, will comply with the Stormwater Regulations set forth in Title 15A NCAC 2H .1000. We are forwarding Permit No. SW4080703 dated September 23, 2008, for the construction of the subject project.

This permit shall be effective from the date of issuance until rescinded and shall be subject to the conditions and limitations as specified therein.

If any parts, requirements, or limitations contained in this permit are unacceptable, you have the right to request an adjudicatory hearing upon written request within thirty (30) days following receipt of this permit. 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, P.O. Drawer 27447, Raleigh, NC 27611-7447. Unless such demands are made this permit shall be final and binding.

If you have any questions, or need additional information concerning this matter, please contact Amy Euliss at [amy.euliss@ncmail.net](mailto:amy.euliss@ncmail.net) or (336) 771-4959.

Sincerely,

  
Steve Tedder  
WSRO Regional Supervisor  
Surface Water Protection Section

cc: Monte Mathews, USACE  
Dr. David Chang, P.E., Hydraulics  
Heath Slaughter, DEO Division 11  
Wetlands/ 401 Transportation Permitting Unit  
File copy, WSRO

STATE OF NORTH CAROLINA  
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES  
DIVISION OF WATER QUALITY  
STATE STORMWATER MANAGEMENT PERMIT  
OTHER PERMIT

In accordance with the provisions of Article 21 of Chapter 143, General Statutes of North Carolina as amended, and other applicable Laws, Rules and Regulations

PERMISSION IS HEREBY GRANTED TO  
*NC Department of Transportation*  
*Replacement of Bridge No. 321 over Watauga River, B-4318*  
*Watauga County*  
FOR THE:

construction of a public road / bridge in compliance with the provisions of 15A NCAC 2H .1000 (hereafter referred to as the "stormwater rules") and the approved stormwater management plans and specifications, and other supporting data as attached and on file with and approved by the Division of Water Quality and considered a part of this permit.

The Permit shall be effective from the date of issuance until rescinded and shall be subject to the following specific conditions and limitations:

#### **I. DESIGN STANDARDS**

1. The impervious surface has been minimized as much as possible.
2. The runoff from the impervious areas has been diverted away from surface waters as much as possible. However, due to topographic constraints, little to no treatment of stormwater from the bridge itself is possible. Because of these unique circumstances combined with substantial cost savings and low traffic volume, stormwater will sheet flow from the bridge into the river.
3. Best Management Practices are employed which minimize water quality impacts.
4. Approved plans and specifications for projects covered by this permit are incorporated by reference and are enforceable parts of the permit.
5. Due to topographic constraints, vegetated roadside ditches are 2:1 slopes lined with Permanent Soil Reinforcement Matting.

#### **II. SCHEDULE OF COMPLIANCE**

1. The permittee shall at all times provide adequate erosion control measures in conformance with the approved Erosion Control Plan.

2. The Director may notify the permittee when the permitted site does not meet one or more of the minimum requirements of the permit. Within the time frame specified in the notice, the permittee shall submit a written time schedule to the Director for modifying the site to meet minimum requirements. The permittee shall provide copies of revised plans and certification in writing to the Director that the changes have been made.
3. The permittee shall submit all information requested by the Director or his representative within the time frame specified in the written information request.
4. The permittee shall submit to the Director and shall have received approval for revised plans, specifications, and calculations prior to construction for the following items:
  - a. Major revisions to the approved plans, such as road realignment, deletion of any proposed BMP, changes to the drainage area or scope of the project, etc.
  - b. Project name change.
  - c. Redesign of, addition to, or deletion of the approved amount of built-upon area, regardless of size.
  - d. Alteration of the proposed drainage.
5. The Director may determine that other revisions to the project should require a modification to the permit.

### **III. GENERAL CONDITIONS**

1. Failure to abide by the conditions and limitations contained in this permit may subject the Permittee to an enforcement action by the Division of Water Quality, in accordance with North Carolina General Statutes 143-215.6A to 143-215.6C.
2. The permit issued shall continue in force and effect until revoked or terminated.
3. The permit may be modified, revoked and reissued or terminated for cause. The filing of a request for a permit modification, revocation and reissuance, or termination does not stay any permit condition.
4. The issuance of this permit does not prohibit the Director from reopening and modifying the permit, revoking and reissuing the permit, or terminating the permit as allowed by the laws, rules, and regulations contained in Title 15A of the North Carolina Administrative Code, Subchapter 2H.1000; and North Carolina General Statute 143-215.1 et. al.
5. The permit is not transferable to any person except after notice to and approval by the Director. The Director may require modification or revocation and reissuance of the permit to change the name and incorporate such other requirements as may be necessary. A formal permit request must be submitted to the Division of Water Quality accompanied by the appropriate fee, documentation from both parties involved, and other supporting materials as may be appropriate. The approval of this request will be considered on its merits, and may or may not be approved. The permittee is responsible for compliance with the terms and conditions of this permit until such time as the Director approves the transfer.

87

6. The issuance of this permit does not preclude the Permittee from complying with any and all statutes, rules, regulations, or ordinances, which may be imposed by other government agencies (local, state and federal) which have jurisdiction.

7. The permittee shall notify the Division of any name, ownership or mailing address changes within 30 days.

Permit issued this, the 5 of August 2008

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

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Coleen Sullins, Director  
Division of Water Quality  
By Authority of the Ecosystem Management Commission

**Permit Number SW4080703**

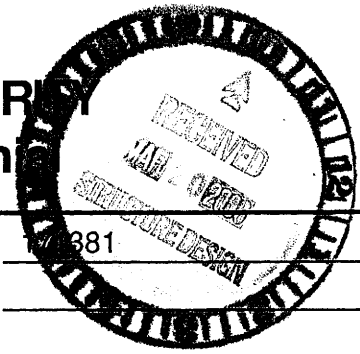


✓ RAR  
3-20-06

88

# TENNESSEE VALLEY AUTHORITY

## Section 26a Approval / Denial



Applicant Name	<u>State Department of Transportation</u>	RLR No.	<u>381</u>
Reservoir	<u>French Broad</u>	Subdivision	_____
Tract No.	_____	Map No.	_____
		Quad Sheet	<u>215 NE</u>
River/Stream Mile	<u>Watagua River - SR 1598</u>	Category	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3
	<u>(Grandfather Road) Project BRZ</u>		
	<u>1598</u>		

**This application has been reviewed. The blocks checked below indicate the status of your request.**

The facilities and/or activities listed below are **APPROVED** subject to the general and special conditions attached.

1. Replacement of Bridge No. 321 - State Project 8.2752501 - TIP Project B-4318
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_

The facilities and/or activities listed below are **DENIED**.

1. \_\_\_\_\_
2. \_\_\_\_\_

This permit **SUPERSEDES** the following previous TVA approval(s).

- |       |               |       |     |       |
|-------|---------------|-------|-----|-------|
| _____ | permit issued | _____ | for | _____ |
| _____ | permit issued | _____ | for | _____ |
| _____ | permit issued | _____ | for | _____ |
| _____ | permit issued | _____ | for | _____ |

TVA Representative KAREN C. STEWART Approval Date 03/16/2006

Requires review by U.S. Army Corps of Engineers (USACE). Plans have been forwarded to the USACE. **No construction shall commence until you have written approval or verification that no permit is required.**

ARAP (For Tennessee locations, a copy of the permit has been sent to the Tennessee Department of Environment and Conservation.

## GENERAL AND STANDARD CONDITIONS

### Section 26a and Land Use

#### General Conditions

1. You agree to make every reasonable effort to construct and operate the facility authorized herein in a manner so as to minimize any adverse impact on water quality, aquatic life, wildlife, vegetation, and natural environmental values.
2. This permit may be revoked by TVA by written notice if:
  - a) the structure is not completed in accordance with approved plans;
  - b) if in TVA's judgment the structure is not maintained as provided herein;
  - c) the structure is abandoned;
  - d) the structure or work must be altered to meet the requirements of future reservoir management operations of the United States or TVA, or;
  - e) TVA finds that the structure has an adverse effect upon navigation, flood control, or public lands or reservations.
3. If this permit for this structure is revoked, you agree to remove the structure, at your expense, upon written notice from TVA. In the event you do not remove the structure within 30 days of written notice to do so, TVA shall have the right to remove or cause to have removed, the structure or any part thereof. You agree to reimburse TVA for all costs incurred in connection with removal.
4. In issuing this Approval of Plans, TVA makes no representations that the structures or work authorized or property used temporarily or permanently in connection therewith will not be subject to damage due to future operations undertaken by the United States and/or TVA for the conservation or improvement of navigation, for the control of floods, or for other purposes, or due to fluctuations in elevations of the water surface of the river or reservoir, and no claim or right to compensation shall accrue from any such damage. By the acceptance of this approval, applicant covenants and agrees to make no claim against TVA or the United States by reason of any such damage, and to indemnify and save harmless TVA and the United States from any and all claims by other persons arising out of any such damage.
5. In issuing this Approval of Plans, TVA assumes no liability and undertakes no obligation or duty (in tort, contract, strict liability or otherwise) to the applicant or to any third party for any damages to property (real or personal) or personal injuries (including death) arising out of or in any way connected with applicant's construction, operation, or maintenance of the facility which is the subject of this Approval of Plans.
6. This approval shall not be construed to be a substitute for the requirements of any federal, state, or local statute, regulation, ordinance, or code, including, but not limited to, applicable electrical building codes, now in effect or hereafter enacted.
7. The facility will not be altered, or modified, unless TVA's written approval has been obtained prior to commencing work.
8. You agree to notify TVA of any transfer of ownership of the approved structure to a third party. Third party is required to make application to TVA for permitting of the structure in their name.
9. You agree to stabilize all disturbed areas within 30 days of completion of the work authorized. All land-disturbing activities shall be conducted in accordance with Best Management Practices as defined by Section 208 of the Clean Water Act to control erosion and sedimentation to prevent adverse water quality and related aquatic impacts. Such practices shall be consistent with sound engineering and construction principles; applicable federal, state, and local statutes, regulations, or ordinances; and proven techniques for controlling erosion and sedimentation, including any *required* conditions.
10. You agree not to use or permit the use of the premises, facilities, or structures for any purposes that will result in draining or dumping into the reservoir of any refuse, sewage, or other material in violation of applicable standards or requirements relating to pollution control of any kind now in effect or hereinafter established.
11. The facility will be maintained in a good state of repair and in good, safe, and substantial condition. If the facility is damaged, destroyed, or removed from the reservoir or stream for any reason, or deteriorates beyond safe and serviceable use, it cannot be repaired or replaced without the prior written approval of TVA.
12. You agree that if any historical or prehistoric archaeological material (such as arrowheads, broken pottery, bone or similar items) is encountered during construction of this facility you will immediately contact this office and temporarily suspend work at that location until authorized by this office to proceed.
13. The Native American Graves Protection and Repatriation Act and the Archaeological Resources Protection Act apply to archaeological resources located on the premises. If LESSEE {or licensee or grantee (for easement) or applicant (for 26a permit on federal land)} discovers human remains, funerary objects, sacred objects, objects of cultural patrimony, or any other archaeological resources on or under the premises, LESSEE {or licensee, grantee, or applicant} shall immediately stop activity in the area of the discovery, make a reasonable effort to protect the items, and notify TVA by telephone (phone \_\_\_\_\_). Work may not be resumed in the area of the discovery until approved by TVA.

14. On TVA land, unless otherwise stated on this permit, vegetation removal is prohibited.
15. You agree to securely anchor all floating facilities to prevent them from floating free during major floods.
16. You are responsible for accurately locating your facility, and this authorization is valid and effective only if your facility is located on or fronting property *owned* or *leased* as shown on your application.

**Standard Conditions:** (Items that pertain to your request have been checked.)

### 1. Structures and Facilities

- a)  TVA number \_\_\_\_\_ has been assigned to your facility. When construction is complete, this number shall be placed on a readily visible part of the outside of the facility in the numbers not less than three inches high.
- b)  The 100-year flood elevation at this site is estimated to be \_\_\_\_\_-feet mean sea level. As a minimum, your fixed facility should be designed to prevent damage to stored boats by forcing them against roof during a 100-year flood event.
- c)  You agree that the float will be temporarily connected (i.e., by slip pin/ropes) and not permanently attached to nonnavigable houseboat.
- d)  You agree that this dock shall have no side enclosures except wire mesh or similar screening.
- e)  Buildings or other enclosed structures containing sleeping or living accommodations, including toilets and related facilities, or that have enclosed floor area in excess of 32 square feet, are prohibited.
- f)  Ski jumps will not be left unattended for extended periods of time. All facilities will be tied to the shoreline or to a boathouse or pier fronting your property at the completion of each day's activities.
- g)  For all electrical services permitted, a disconnect must be located at or above the \_\_\_\_\_-foot contour that is accessible during flooding.
- h)  You should contact your local government official(s) to ensure that this facility complies with all applicable local floodplain regulations.
- i)  The entire closed-loop coil heating and air conditioning system and its support apparatus must be either placed below elevation \_\_\_\_\_ (to provide a five-foot clearance for water craft at minimum pool elevations of \_\_\_\_\_) or located underneath a TVA approved water-use facility or other TVA approved structure. The supply and return lines must be buried as they cross the reservoir drawdown zone in areas of water depth less than five feet (minimum pool). The liquid contents of the closed-loop heating and air conditioning system must be propylene glycol or water, and the applicant or authorized agent must provide TVA with written verification of this fact.
- j)  You agree that only those facilities which have been approved by TVA prior to construction will be placed within the harbor limits and that permanent mooring buoys, boat slips, or other harbor facilities will not be placed outside the harbor limits.
- k)  You agree that all storage, piping, and dispensing of liquid fuel shall comply with applicable requirements of the "Flammable and Combustible Liquids" section of the National Fire Codes and any additional requirements of federal, state, and local laws and regulations.
- l)  You agree that the \_\_\_\_\_ facility hereby approved will be used for \_\_\_\_\_ and for no other purpose unless approved in writing from TVA.
- m)  You agree that the construction project covered by this permit will be completed by the following date: 2007.

### 2. Ownership Rights

- a)  No fill will be placed higher than elevation \_\_\_\_\_ maximum shoreline contour (msc), and every precaution will be taken not to disturb or alter the existing location of the \_\_\_\_\_-foot contour elevation through either excavation or placement of fill.
- b)  It is understood that you own partial interest in the land at this location. Therefore, you should be aware that, if objections to this structure are received by the other owners of partial interest at this site, that action may be cause for TVA to consider revoking this permit.



- c)  You are advised that TVA retains the right to flood this area and that TVA will not be liable for damages resulting from flooding.
- d)  You shall notify TVA of any sale or transfer of land, which would affect the landward limits of harbor area, as far in advance of such sale or transfer as possible.
- e)  This approval of plans is only a determination that these harbor limits will not have any unacceptable effect on TVA programs or other interests for which TVA has responsibility. Such approval does not profess or intend to give the applicant exclusive control over the use of navigable waters involved.
- f)  You recognize and understand that this authorization conveys no property rights, grants no exclusive license, and in no way restricts the general public's privilege of using shoreland owned by or subject to public access rights owned by TVA. It is also subject to any existing rights of third parties. Nothing contained in this approval shall be construed to detract or deviate from the rights of the United States and TVA held over this land under the Grant of Flowage Easement. This Approval of Plans does not give any property rights in real estate or material and does not authorize any injury to private property or invasion of private or public rights. It merely constitutes a finding that the facility, if constructed at the location specified in the plans submitted and in accordance with said plans, would not at this time constitute an obstruction unduly affecting navigation, flood control, or public lands or reservations.

### 3. Shoreline Modification and Stabilization

- a)  For purposes of shoreline bank stabilization, all portions will be constructed or placed, on average, no more than two feet from the existing shoreline at normal summer pool elevation.
- b)  You agree that spoil material will be disposed of and contained on land lying and being above the \_\_\_\_\_-foot contour. Every precaution will be made to prevent the reentry of the spoil material into the reservoir.
- c)  Bank, shoreline, and floodplain stabilization will be permanently maintained in order to prevent erosion, protect water quality, and preserve aquatic habitat.
- d)  You agree to reimburse TVA \$\_\_\_\_\_, which is the current value of the \_\_\_\_\_ acre feet of power storage volume displaced by fill into the reservoir.

### 4. Water Intake

- a)  If the reservoir falls below the elevation of the intake, the applicant will be responsible for finding another source of raw water.
- b)  You must install and maintain a standard regulatory hazard buoy at the end of the intake to warn boaters of the underwater obstruction. The word "intake" should be added to the buoy and be attached using a five-foot cable.
- c)  The screen openings on the intake strainer must be 1/8-inch (maximum), to minimize the entrapment of small fish.
- d)  This approval does not constitute approval of the adequacy or safety of applicant's water system. TVA does not warrant that the water withdrawn and used by applicant is safe for drinking or any other purpose, and applicant is solely responsible for ensuring that all water is properly treated before using.

### 5. Bridges and Culverts

- a)  You agree to design/construct any instream piers in such a manner as to discourage river scouring or sediment deposition.
- b)  Applicant agrees to construct culvert in phases, employing adequate streambank protection measures, such that the diverted streamflow is handled without creating streambank or streambed erosion/sedimentation and without preventing fish passage.
- c)  Concrete box culverts and pipe culverts (and their extensions) must create/maintain velocities and flow patterns which offer refuge for fish and other aquatic life, and allow passage of indigenous fish species, under all flow conditions. Culvert floor slabs and pipe bottoms must be buried at least one foot below streambed elevation, and filled with naturally occurring streambed materials. If geologic conditions do not allow burying the floor, it must be otherwise designed to allow passage of indigenous fish species under all flow conditions.
- d)  All natural stream values (including equivalent energy dissipation, elevations, and velocities; riparian vegetation; riffle/pool sequencing; habitat suitable for fish and other aquatic life) must be provided at all stream modification sites. This must be accomplished using a combination of rock and bioengineering, and is not accomplished using solid, homogeneous riprap from bank to bank.
- e)  You agree to remove demolition and construction by-products from the site--for recycling if practicable, or proper disposal--outside of the 100-year floodplain. Appropriate BMPs will be used during the removal of any abandoned roadway or structures.

**6. Best Management Practices****92**

- a)  You agree that removal of vegetation will be minimized, particularly any woody vegetation providing shoreline/streambank stabilization.
- b)  You agree to installation of cofferdams and/or silt control structures between construction areas and surface waters prior to any soil-disturbing construction activity, and clarification of all water that accumulates behind these devices to meet *state* water quality criteria *at the stream mile where activity occurs* before it is returned to the *unaffected portion of the stream*. Cofferdams must be used wherever construction activity is at or below water elevation.
- c)  A floating silt screen extending from the surface to the bottom is to be in place during excavation or dredging to prevent sedimentation in surrounding areas. It is to be left in place until disturbed sediments are visibly settled.
- d)  You agree to keep equipment out of the reservoir or stream and off reservoir or stream banks, to the extent practicable (i.e., performing work "in the dry").
- e)  You agree to avoid contact of wet concrete with the stream or reservoir, and avoid disposing of concrete washings, or other substances or materials, in those waters.
- f)  You agree to use erosion control structures around any material stockpile areas.
- g)  You agree to apply clean/shaken riprap or shot rock (where needed at water/bank interface) over a water permeable/soil impermeable fabric or geotextile and in such a manner as to avoid stream sedimentation or disturbance, or that any rock used for cover and stabilization shall be large enough to prevent washout and provide good aquatic habitat.
- h)  You agree to remove, redistribute, and stabilize (with vegetation) all sediment which accumulates behind cofferdams or silt control structures.
- i)  You agree to use vegetation (versus riprap) wherever practicable and sustainable to stabilize streambanks, shorelines, and adjacent areas. These areas will be stabilized as soon as practicable, using either an appropriate seed mixture that includes an annual (quick cover) as well as one or two perennial legumes and one or two perennial grasses, or sod. In winter or summer, this will require initial planting of a quick cover annual only, to be followed by subsequent establishment of the perennials. Seed and soil will be protected as appropriate with erosion control netting and/or mulch and provided adequate moisture. Streambank and shoreline areas will also be permanently stabilized with native woody plants, to include trees wherever practicable and sustainable (this vegetative prescription may be altered if dictated by geologic conditions or landowner requirements). You also agree to install or perform additional erosion control structures/techniques deemed necessary by TVA.

**Additional Conditions**