

NOTICE

REQUEST FOR PROPOSALS
FOR
STREAM DEBRIS REMOVAL
on
Specific Reaches
Within
LIMESTONE AND MUDDY CREEKS
DUPLIN COUNTY, NORTH CAROLINA

The Duplin County Board of Commissioners is seeking proposals for stream debris removal work on specific reaches of Limestone and Muddy Creeks in Duplin County, North Carolina.

NO GROUP SITE SHOWING IS SCHEDULED. Prospective bidders shall contact the **Duplin Soil & Water Conservation District/NRCS Office at 165 Agriculture Drive in Kenansville, NC for a bid packet to be picked up or mailed.** It is the responsibility of the prospective bidder to inspect the potential work sites, ask questions and develop his/her own bid for consideration.

Stream debris removal includes removing and disposing of trees, logs, stumps, snags, shrubs, brush, aquatic weeds and other obstructions from the flow area of the natural or excavated channel as per NRCS standard 326 "Clearing and Snagging" through the use of hand labor and associated machinery only, *no heavy machinery (i.e. track hoes, draglines, etc.) will be utilized* for this project.

Work sites will be coordinated/prioritized with Duplin County NRCS/Soil and Water Conservation personnel prior to beginning work. All work shall proceed sequentially upstream with each section to be approved in the same order until all sections are completed. Initiation of the project shall begin after approval from the appropriate regulatory authorities. This date, once determined, will be conveyed by the Duplin County NRCS/Soil and Water Conservation personnel to the apparent low bidder/contractor. All work shall be completed by **6/30/2010 or 180 days after initiation of work, whichever is earlier**, or liquidated damages will be assessed at a rate of \$50 per day.

All proposals must be received in the Duplin County NRCS/Soil and Water Conservation District Office by 11:00 AM May 29, 2009, to be considered. Proposals should be marked "Stream Debris Removal". ADDITIONALLY, THE PROPOSAL SHALL INCLUDE: 1) a current certificate of general liability insurance in the amount of *one-million dollars*, 2) current worker's compensation insurance, 3) a list of any subcontractors and/or employees that may be used on the job (this list will be the only time to name any employees and/or subcontractors), 4) a list of references, 5) a detailed list of the equipment and hand tools that the employees or subcontractors will be using on the job, and 6) a letter of intent from your performance bond company.. The proposals may be delivered to 165 Agriculture Drive, Kenansville, NC, Monday through Friday, 8:00 am to 5:00 pm, or mailed to PO Box 219, Kenansville, NC 28349. Proposals that do not arrive by 11:00 AM on the opening date will not be considered. Faxed proposals will not be accepted.

Prospective bidders are hereby notified that the successful bidder must be deemed eligible to do business in the State of North Carolina if the business resides in the State of North Carolina, or have a valid General Contractors License and be in good standing with the North Carolina State Licensing Board of General Contractors if the business resides outside the State of North Carolina and a valid contractor's license is required throughout the contract period.

The successful bidder will be required to execute a contract. *The bidder will be required to furnish to the County a performance bond in the penal sum of not less than one hundred (100%) of the original contract amount. Performance Bond may be used for this purpose and will be supplied by the successful bidder at the time of the award of the contract.*

The right is reserved to reject any or all proposals. Any proposal that is deemed deficient in any regard can be rejected regardless of how it compares with any other bid amount proposed by any other bidder.

This request for proposals consists of listed work items. The proposals received from different bidders will be compared on the basis of the sum of the bids for all of the listed items. That is, the overall low bid, unless somehow deemed deficient, will be awarded the contract to complete the work. The County of Duplin reserves the right to award a contract to complete some but not all of the listed items. If the contract awarded is to complete less than the listed work items, the contract price will be based on the listed work item prices submitted by the bidder as a result of this request.

Further, if the initial contract is to complete less than the listed work items described in this request for proposals, additional funds may be allocated in the future to complete some or all of the other work items described in this request for proposals. Any additional funding, if it becomes available, will be added to the initial contract by contract modification. In the event of additional funds becoming available and the original contract modified, the contractor will complete the additional work item(s) for the price bid in his/her original proposal.

All work, whether initially funded or added to the contract because of additional funding, must be completed by **6/30/2010 or 180 days after initiation of work, whichever is earlier.**

If interested in submitting a proposal for this work, a complete packet of information may be obtained at the Duplin Soil and Water Conservation District/NRCS Office at 165 Agriculture Drive in Kenansville or by calling 910-296-2120 or 296-2121, Monday thru Friday, 8:00 AM – 5:00 PM.

CONTRACT FOR MAXWELL CREEK
STREAM DEBRIS REMOVAL
PROJECT

I. Scope

The work shall consist of removing and disposition of trees, logs, stumps, snags, shrubs, brush, aquatic weeds and other obstructions from the flow area of the natural or excavated channel (here forward to be referred to as "stream debris removal").

II. Marking

The limits of the area for stream debris removal are shown on the attached plan map. The vertical limits of each reach are defined by the road crossings or the confluence of different creeks. The horizontal limits of each reach are defined by the natural width of each channel.

III. Clearing

Unless otherwise specified, obstructions not marked for preservation shall be cut off as near the ground surface as conventional tools and field conditions will permit (this does not include vertically standing trees in the riparian area). All trees not marked for preservation and all snags, logs, brush, shrubs, and other obstructions shall be cleared from within the limits of the designated areas.

IV. Disposal

All materials cleared from the designated areas shall be disposed of in a location and in a manner shown on the drawings (Attachment B and C), or as specified in Section VI of this specification.

V. Measurement and Payment

Payment for stream debris removal work will be made at the contract unit price for all item(s) in a lump sum at completion of project, and shall constitute full compensation for all labor, equipment, tools, and all other item(s) necessary and incidental to the completion of the work. Compensation for any item of work described in the contract but not listed in the bid schedule will be included in the payment for the item of work to which it is made subsidiary. Such item(s) and the item(s) to which they are made subsidiary are identified in Section VI of this specification. Payment will be contingent on receipt of signed lien waivers of any and all subcontractor's lien waiver(s), supplier's lien waiver(s) and any other applicable lien waiver.

VI. Items of Work and Construction Details

Item(s) of work to be performed in conformance with this specification and the construction details therefore are:

The personnel from the Duplin SWCD (here forward referred to as "Inspector") shall be responsible for inspecting the completed work for the project and ensuring the quality of work meets NRCS standard 326 "Clearing and Snagging."

The Contractor shall respect the rights of the landowner to salvage timber 500 feet in advance of, and prior to, clearing operations. The Contractor shall dispose of any remaining timber, brush, or other woody growths as indicated below but shall not salvage any timber.

The clearing crew shall be organized in such a manner that trees, brush, logs, snags, etc., that are cut from the channel banks and bottom will be removed from this area as the clearing progresses. At the end of any day's operation, there shall be no more than approximately a 500-foot reach where the fallen trees have not been removed from the channel.

Trees shall be felled in such a manner as to cause a minimum of damage to trees left standing. Trees left standing that are excessively damaged by the clearing and snagging operations shall be removed at the expense of the Contractor. Excessive damage to trees shall consist of excessive peeling of bark, excessive cutting of the root system, or other excessive damage as determined by the Inspector.

Trees shall be felled in such a manner as to avoid damage to existing structures, or installations, and with due regard for the safety of persons and property.

During the channel stream debris removal operations, all lateral channels, side ditches, and natural drainage ways shall be left open so as not to obstruct the flow of water. Existing debris in all lateral channels, side ditches, and natural drainage ways within 15 ft of the main channel top of bank shall be removed and disposed of as shown in Attachment C.

The Contractor shall promptly notify the District Engineer with the NC DOT when debris accumulates at the public highway bridges and culverts as a result of his channel stream debris removal operations.

Floating debris that is released during the channel work shall be trapped. Debris shall be removed from the traps as necessary or daily. One trap shall be maintained near the outlet end of any unaccepted portion of the work. Traps shall be of the floating type if in an area of backwater.

In areas where aquatic weeds such as alligator weed is hindering the proper flow of the channel, the aquatic weeds will be treated using herbicides that are labeled for the specific use and in accordance with local, state and federal regulations.

Additional stream debris removal specifications are subject to the "Inspectors" interpretation of Attachment A.

VII. Bid Item

The contract bid shall be based on the work to be performed as described in Section VI of this contract on each of the following reaches. Bids shall be listed for each subsection and totaled in Section VIII.

1. M-1: Confluence of Muddy Creek with Northeast Cape Fear River to Durwood Evans (SR 1964)

\$ _____
Section Bid Amount

2. M-2: Durwood Evans (SR 1964) to NC 41 and 111

\$ _____
Section Bid Amount

3. M-3: NC 41 and 111 to Jackson Store Rd (SR 1800)

\$ _____
Section Bid Amount

4. M-4: Jackson Store Rd (SR 1800) to Quinn Store Rd (SR 1804)

\$ _____
Section Bid Amount

5. M-5: Quinn Store Rd (SR 1804) to Lyman Rd (SR 1801)

\$ _____
Section Bid Amount

6. M-6: Lyman Rd (SR 1801) to rock structure

\$ _____
Section Bid Amount

7. L-1: Confluence of Limestone Creek with Northeast Cape Fear River to S Blizzard Town Rd (SR 1702)

\$ _____
Section Bid Amount

8. L-2: S Blizzard Town Rd (SR 1702) to NC 24

\$ _____
Section Bid Amount

9. L-3: NC 24 to NC 111

\$ _____
Section Bid Amount

10. L-4: NC 111 to NC 241

\$ _____
Section Bid Amount

11. L-5: NC 241 to NC 41

\$ _____
Section Bid Amount

12. L-6: NC 41 to Wagon Ford Rd (SR 1715)

\$ _____
Section Bid Amount

13. L-7: Wagon Ford Rd (SR 1715) to NC 24

\$ _____
Section Bid Amount

VIII. Contract Bid Price and Signature

\$ _____
Total Contract Bid Amount

Contractors Signature

Print Contractors Name

Print Company Name

Print Company Address

Tax ID #

Date

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

CLEARING AND SNAGGING

(Ft.)

CODE 326

DEFINITION

Removing snags, drifts, or other obstructions from a channel or drainage way.

PURPOSE

Reducing significant human and/or natural environmental risks by improving physical characteristics of a channel to:

- Restore flow capacity.
- Prevent bank erosion by eddies.
- Reduce the formation of bars.
- Minimize blockages by debris and ice.

CONDITIONS WHERE PRACTICE APPLIES

Any channel or urban floodway where the removal of trees, brush, and other obstructions is needed to accomplish one or more of the listed purposes.

CRITERIA

Clearing and snagging measures shall be planned, designed, and constructed to comply with all Federal, State, and local laws and regulations.

Clearing and snagging shall not be completed on any channel where significant channel erosion will occur, major impairment to the landscape resource quality is likely, or significant impairment to habitat for fish and wildlife will occur, unless needed restoration actions are included with the application of this practice.

Capacity

The capacity of the channel, both before and after improvement, shall be determined using Manning's Formula with applicable values of the retardance factor "n" from Supplement B to the National Engineering Handbook, Section 5 – Hydraulics, or similar source. The value of "n" used to determine channel capacity after improvement shall reflect the degree of natural changes and maintenance expected to occur in future years.

Location

The area to be cleared and snagged shall include the perimeter of the channel, the flow area of the urban floodway, or both. Trees on the bank that are leaning over or other objects that may fall into the channel shall also be included. If root balls are still attached to the streambank, cut off the log 6 to 12 inches above the ground and leave the stump and root mass for bank stability.

Stability

Clearing and snagging shall only be specified for other areas such as: berms, areas used for temporary disposal sites or travelways, or for other planned conservation uses where needed to implement this practice.

Clearing and snagging shall not impair channel stability. The criteria for determining channel stability shall comply with Conservation Practice Standard (582), Open Channel. The effect on downstream and upstream reaches due to the removal of obstructions shall be analyzed using appropriate stream and channel geomorphologic procedures.

If clearing and snagging will result in streambank erosion, criteria within

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

**NRCS, NC
December 2006**

Conservation Practice Standard (580), Streambank and Shoreline Protection will be used in conjunction with this standard.

Vegetation

All areas denuded and disturbed during snag removal shall be restored by planting native vegetation where practical. Disturbance of wetlands, riparian areas, and fish and wildlife habitat sites shall be minimized or avoided where possible. Cleared material shall be removed from the floodplain or deposited in approved areas that will not significantly affect the flow capacity of the stream.

CONSIDERATIONS

Ground-disturbing activities associated with this practice, including but not limited to areas of equipment/vehicle traffic in the channel and floodway and areas of vegetation removal, have the potential to adversely affect cultural resources.

Insure that threatened and endangered species and their habitat shall not be permanently adversely impacted by the use of this practice.

Effects on water quantity and quality should be considered.

Removal of deadfalls, stumps, and trees from streambanks and channels may increase discharge, velocity and channel capacity that could reduce flood damage from out of bank flow.

Improved flow conditions may lower the hydraulic gradient and drain flood plains more quickly. Rapid drawdown may cause sloughing of saturated, unstable streambanks.

Decreased groundwater recharge in water-losing streams may result from reduced residence time of water in the channel.

Temporary losses of aquatic or wetland habitat may occur with the removal of vegetation.

During implementation of the practice, there may be increased turbidity due to an increased sediment load. Water quality may be further degraded by chemical substances (i.e. organic nitrogen or phosphorus) attached to the sediment particles.

During construction, a heavy organic load may be produced resulting in a decreased availability of dissolved oxygen. Long-term effects may cause a decrease in yields of sediment and sediment-attached substances.

Increased surface water temperatures, at low flow, may occur from removal of shade-producing canopy until regrowth occurs. Accelerated flows may reduce the period of time water is exposed for "sun warming," thus reducing water temperature.

In streams carrying dissolved substances, a reduction in ground water recharge may contribute to improved aquifer quality.

The number of pools and riffles forming the channel bottom may be reduced, and fish habitat could be adversely affected.

Measures and construction methods that enhance fish and wildlife values should be incorporated as needed and practical. Special attention should be given to landscape aesthetics, to protecting and maintaining key shade, food, and den trees, and to stabilization of disturbed areas.

Consider removal methods and the disposal location of cleared material that will not be used for bioengineering (removal from site, placement in or out of the floodplain, not placed in wetland areas, etc.), and implement according to permit conditions.

PLANS AND SPECIFICATIONS

Plans and specifications for clearing and snagging shall be in keeping with this standard and shall describe the requirements for applying the practice to achieve its intended purpose(s).

Construction operations shall be carried out in a manner and sequence so that impacts on the environment will be minimized and held within acceptable limits.

All operations shall be carried out in a safe and skillful manner. Safety and health regulations shall be observed and appropriate safety measures used.

OPERATION AND MAINTENANCE

A maintenance program shall be established by the landowner/user to maintain channel capacity and vegetative cover. Items to consider are:

- Where applicable, control grazing in the construction area during vegetative establishment and when soil conditions are wet.
- Fertilize as needed to maintain a vigorous vegetative cover.
- Promptly repair eroded areas.
- Remove major silt and sediment accumulations in the channel cross-section as soon as practical, when the effects are causing significant bank erosion problems.
- Re-establish vegetation cover immediately where scour erosion has removed established seeding.
- Keep inlets to side drainage structures and channels open and armor if necessary.
- Periodically inspect the area for signs of significant streambank undermining or instability.

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE SPECIFICATION

CLEARING AND SNAGGING

CODE 326

SPECIFICATIONS

All trees, stumps, and brush within the perimeter of the channel shall be cut as close to ground level as conventional tools permit. If other areas are to be cleared, the trees, brush, and other woody vegetation shall be cut within the maximum distance above ground level specified.

Trees shall be felled in such a manner as to avoid damage to other trees, property, and objects outside the limits of clearing.

Down trees, logs, drifts, boulders, debris and other obstructions lying wholly or partially within the channel shall be removed. Piling, piers, headwalls, and sediment bars that obstruct the free flow of water will be removed when so designated in the project plan.

If herbicide treatment is planned, the stumps and brush in the specified area shall be treated at the time of clearing in accordance with the recommendations of the manufacturer of the herbicide specified or being used and in accordance with all applicable federal, state, and local rules and regulations.

The use of explosives in all clearing and snagging operations shall be in strict accordance with all applicable federal, state, and local rules and regulations.

If channels are located in cultivated areas or in areas of high value land,

trees, logs, and all combustible material resulting from the clearing and snagging operations shall be burned, buried, or piled in designated disposal areas as specified for the project. In other areas, such as woodland or range land, where burning is prohibited, material shall be disposed of in such a manner that it will not float away or re-enter the channel.

All burning shall be performed outside the channel and shall conform to regulations in effect in the area.

Residue from burning and non-combustible material shall be buried outside the channel or placed in designated disposal areas. All buried material shall have adequate earth cover to permit proper land use.

Selective snagging, where possible, shall be performed primarily with hand-operated equipment, water-based equipment, or small equipment used in a manner that will minimize soil, water, and other resource disturbances.

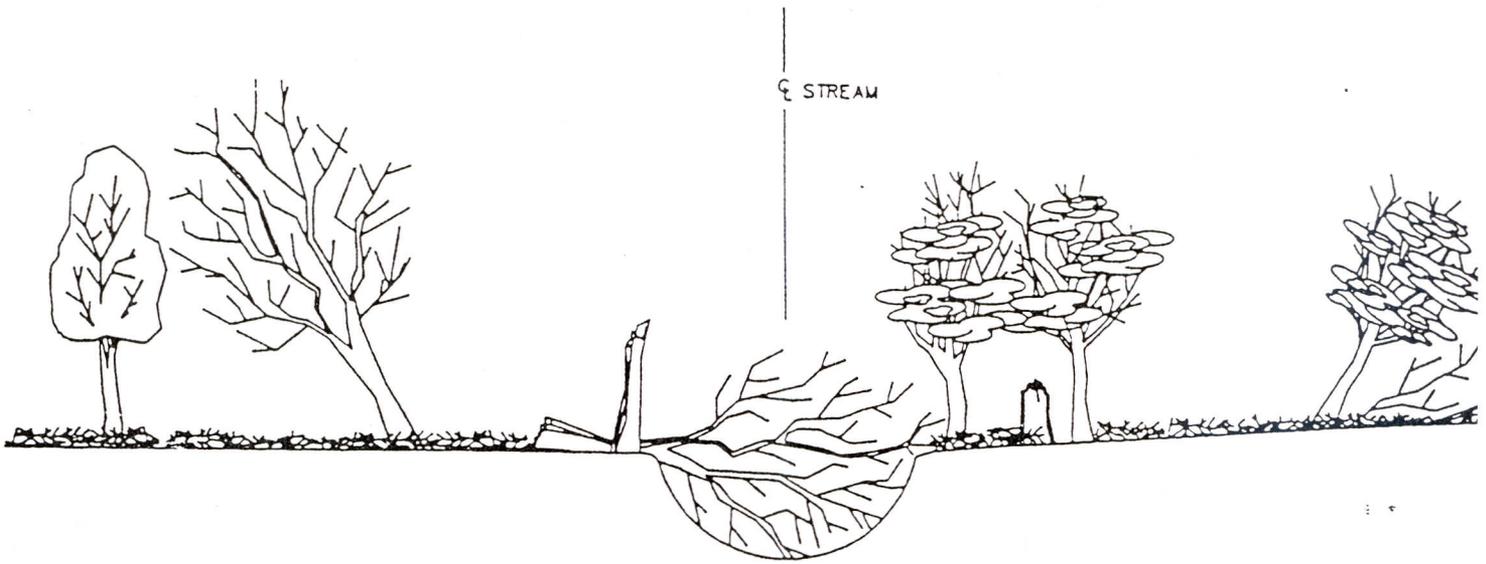
Measures and construction methods that enhance fish and wildlife values shall be incorporated as needed and practical. Special attention shall be given to visual resources protecting and maintaining key shade, food, and den trees and to stabilization of disturbed areas.

NRCS, NC

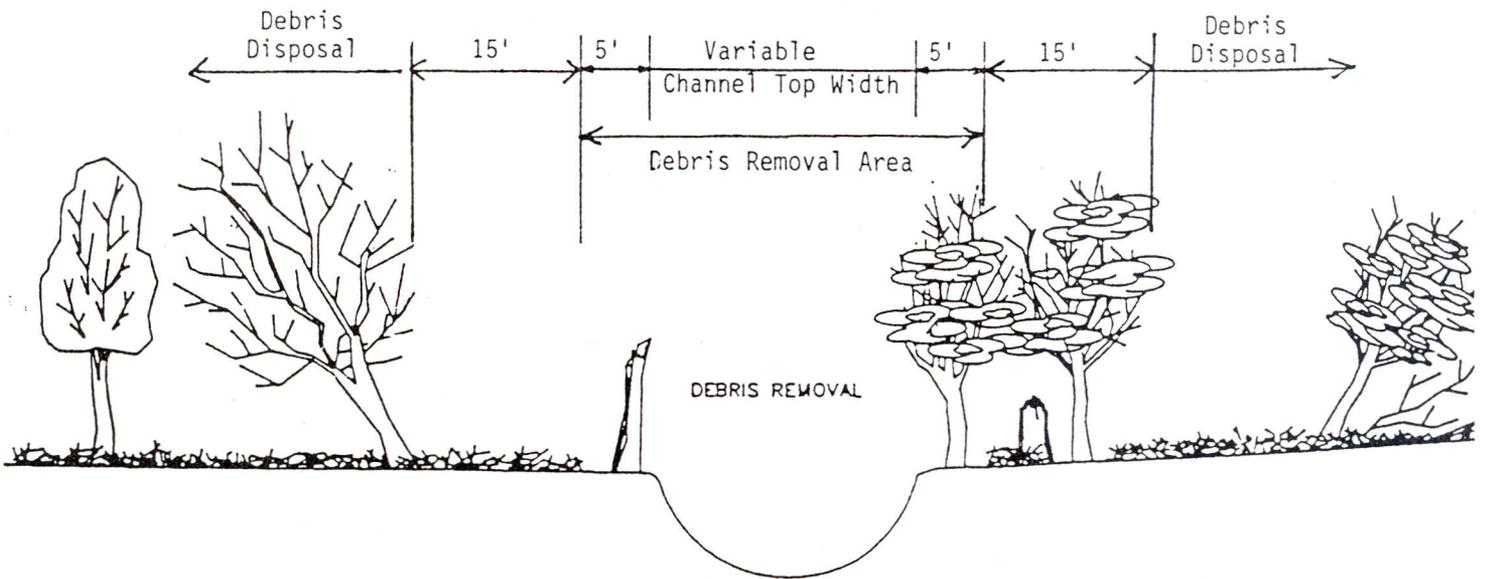
December 2006

Specification
(Main Stream Channel)

Attachment B



BEFORE CONSTRUCTION



AFTER CONSTRUCTION

Site Number: All Sites

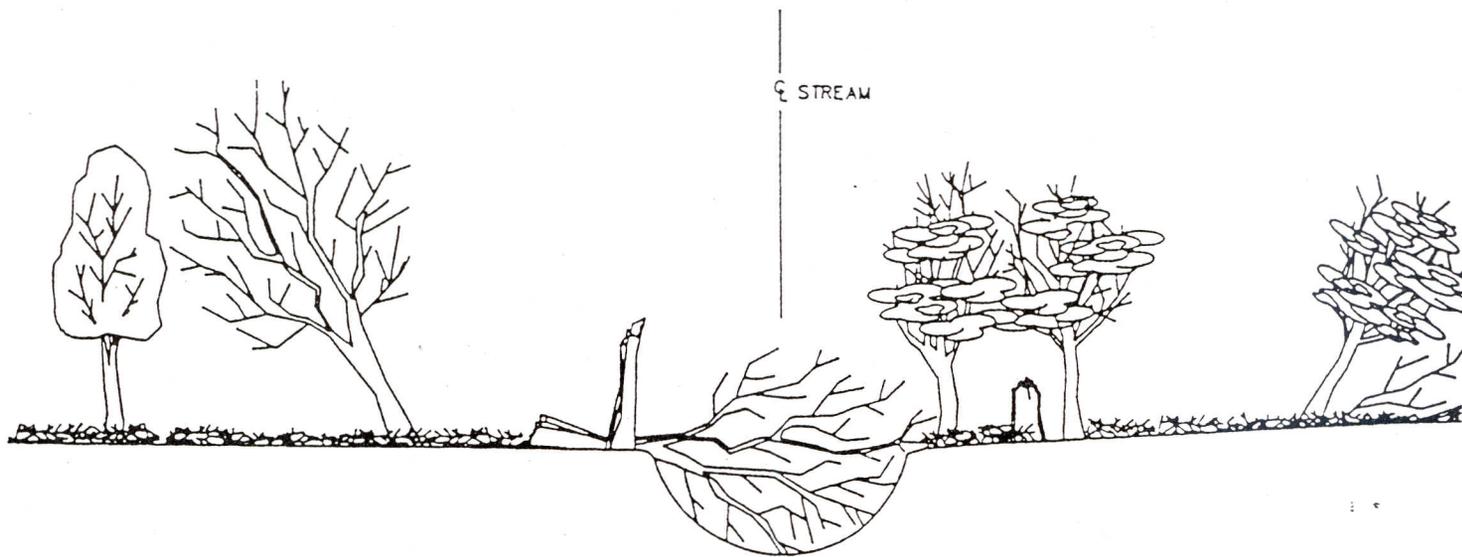
TYPICAL CROSS SECTION
CLEARING & SNAGGING PROJECT
CEDAR FORK CREEK/BIG BRANCH
DUPLIN COUNTY, NC

- NOTE:
1. Not to Scale.
 2. Left and right, as facing downstream.
 3. In "improved" and other specified areas, the debris shall be hauled off-site to the designated disposal area.

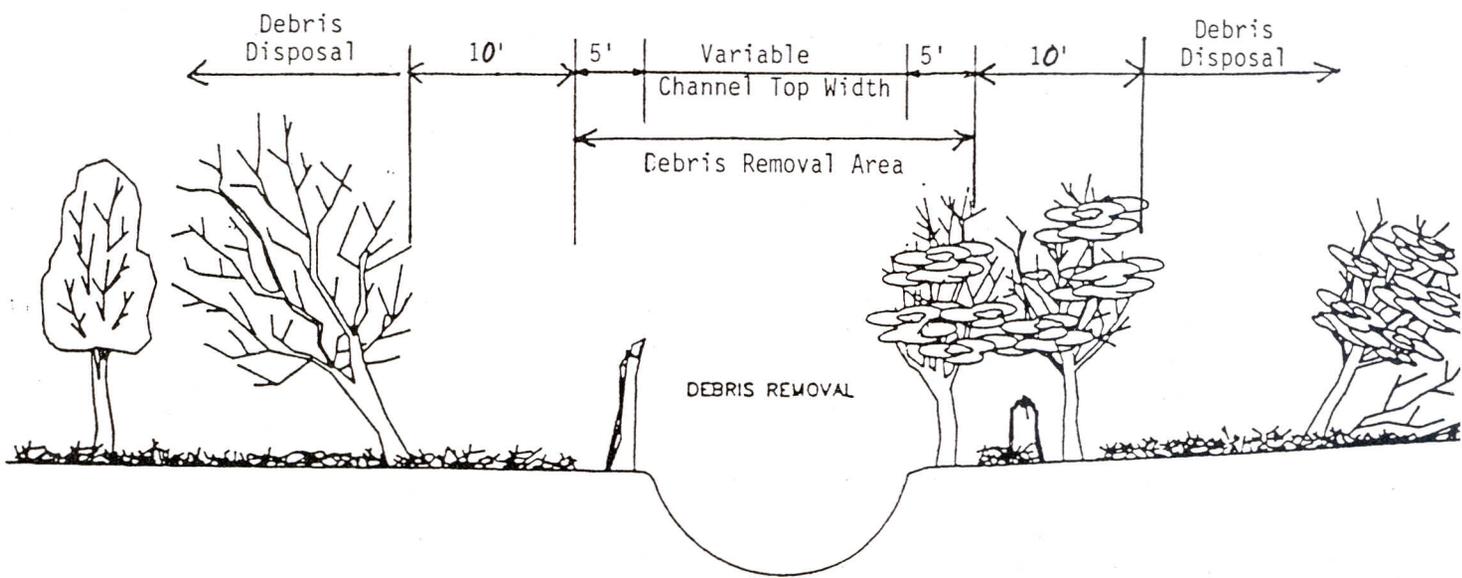
Specification

Attachment C

(Lateral channels, side ditches, natural drains to the main stream channel)



BEFORE CONSTRUCTION



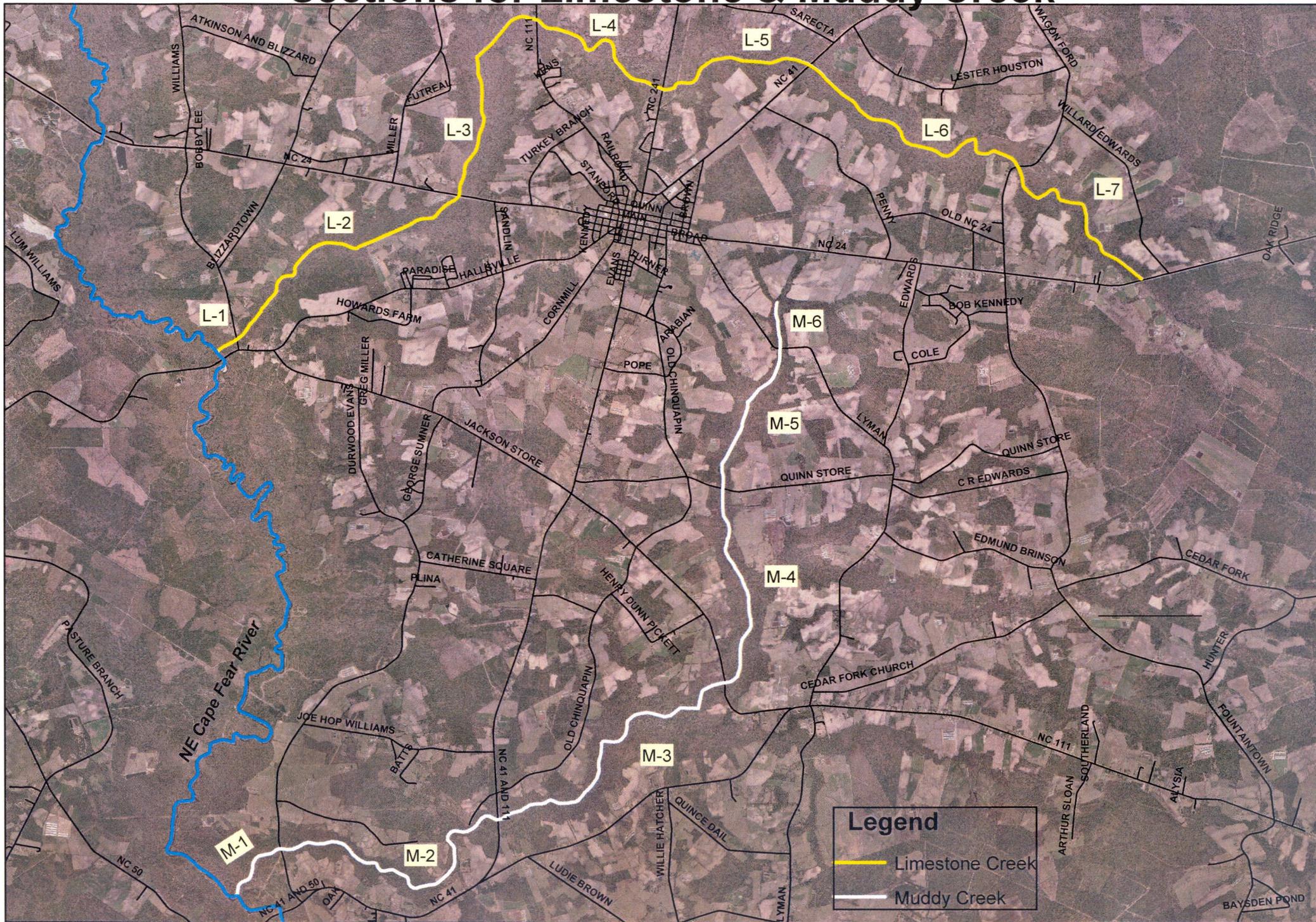
AFTER CONSTRUCTION

Site Number: All Sites

TYPICAL CROSS SECTION
CLEARING & SNAGGING PROJECT
CEDAR FORK CREEK/BIG BRANCH
DUPLIN COUNTY, NC

- NOTE:
1. Not to Scale.
 2. Left and right, as facing downstream.
 3. In "improved" and other specified areas, the debris shall be hauled off-site to the designated disposal area.

Sections for Limestone & Muddy Creek



1 inch equals 6,000 feet