



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE  
GOVERNOR

EUGENE A. CONTI, JR.  
SECRETARY

August 21, 2012

**Addendum No. 1**

**Certified Mail**

RE: Foliar Herbicide Applications

**WORK ORDER NUMBER:** 12.101813, 12.102313, 12.103613, 12.104913, & 12.105513

**ROUTE:** VARIOUS

**COUNTY:** CLEVELAND, GASTON, CATAWBA, LINCOLN & IREDELL

**DESCRIPTION:** LOW-VOLUME, BACKPACK, FOLIAR HERBICIDE APPLICATIONS (SUPPLY AND APPLY)

**BID OPENING:** 10:00 AM Tuesday, August 28, 2012

To Whom It May Concern:

Reference is made to the proposal furnished to you on this project.

The following revisions have been made to the Proposal:

On Page Nos. 17 & 18 "Herbicides and Equipment" of the project's special provisions has been revised. Please void Page Nos. 17, 18 & 27 in your proposal and replace with the revised Page Nos. 17, 18 & 27 thereto.

On Page No. 27 the following pay item additions or deletions have been made to the contract bid form:

ITEM	SECT	DESCRIPTION	OLD QTY	NEW QTY	UNIT
2	SP	Herbicide (Supply)	3360	<b>REMOVED</b>	Gallons
2	SP	Herbicide for "Complete Tree Removal" (Supply)	----	672	Gallons
3	SP	Herbicide for "Selective Tree Removal" (Supply)	----	2688	Gallons

Sincerely,

Mr. M.L. Holder, P.E.  
Division Engineer, Twelfth Division

- 6 In the event this work results in damage to DOT property such as damage to non-target species, erosion, right-of-way fence damage, etc., the contractor will be responsible for all repair and replacement costs.
- 7 The contractor will be responsible for any claims from third parties resulting from this work. The contractor will indemnify and hold harmless the NCDOT against any and all claims or causes of action, and all losses therefrom, arising out of or in any way related to this operation under this permit.
- 8 The contractor agrees to abide by the latest edition of the *Manual on Uniform Traffic Control Devices for Streets and Highways*. The contractor will erect necessary signs and/or barriers for the protection of the public and indemnifies the Department from any and all claims that might arise on account of said work.
- 9 In the event that the contractor fails to comply with the terms of this contract, the NCDOT reserves the right to temporarily or permanently suspend (or void) the contract, until such time that the contractor can demonstrate their ability to perform the requested work within the terms of the contract.

### **Application Method**

All herbicide applications shall be low-volume, foliar backpack applications with only the targeted species, i.e., hardwoods and pines, treated. Crews shall consist of 1 crew supervisor and 4 applicators using backpacks with specialized nozzles for application. A low-volume, foliar backpack application has the following advantages over other methods:

1. With low volume foliar applications; only the targeted species are treated. This results in the right-of-way retaining as much forb and grass vegetation as possible. This will help the right-of-way retain its “green” look and provide habitat for wildlife.
2. Low volume foliar application is low profile. No large trucks or noisy spray devices are used - only employees with backpacks.
3. Low volume foliar applications are extremely effective due to the higher concentration of herbicide applied to the individual plants/stems.

### **Herbicides and Equipment**

Low-volume backpack, foliar applications are defined as less than 12 gallons of total mix per acre. In order to effectively control hardwoods, the active ingredient imazapyr needs to be used. Care should be taken to avoid movement of imazapyr due to rainfall or other circumstances. In areas where ‘complete tree removal is the anticipated objective’, a tank mix of 0.5% Polaris (aquatic arsenal), 4.0% Rodeo and 1.0% aquatic approved surfactant shall be the preferred foliar treatment application. Extreme care should be exercised if desirable hardwood trees are in the surrounding area or on adjacent property. This formulation will effectively control the regrowth and also alleviate issues that might arise should water be encountered on the rights of way as this mix is reduce the visual impact from the brown out that will occur. This type of herbicide is to be applied to approximately twenty percent of the routes treated unless otherwise stated by the Engineer.

In areas where selective stand thinning and limbing occurred (several median areas), a tank mix of Garlon 3A (1.0%) plus 1.5 ounces of Escort (MSM) plus an aquatic approved surfactant (0.25%) shall be the preferred foliar treatment. It is recommended that this application be initiated after the first of August to reduce the visual impact from the brown out that will occur. This type of herbicide is to be applied to approximately eighty percent of the routes treated unless otherwise stated by the Engineer. Due to potential product interactions and labeling issues, alternative tank mixes may be considered with prior approval by the Division Roadside Environmental Engineer.

All herbicides shall be pre-mixed by a company that specializes in returnable-refillable, closed-system technology. By purchasing pre-mixed herbicides possible mixing mistakes are virtually eliminated. During the applications, closed-herbicide container systems shall be utilized on the crew trucks to reduce worker exposure, help alleviate public concern and protect wildlife habitat. Additionally, issues associated with the triple-rinsing requirements, rinsate disposal, and container disposal are eliminated with a closed system. Materials shall NOT be applied within 50 feet of either side of a stream or river crossing in keeping with Fertilizer Application Best Management Practices.

Measurement and Payment:  
Herbicide application will be measured and paid for as the actual number of crew hours worked while applying herbicides along the surface of the ground, as directed.  
Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
Herbicide Application	Crew Hours
Herbicides for “Complete Tree Removal”	Gallons
Herbicides for “Selective Tree Removal”	Gallons

**UTILITY CONFLICTS**

It shall be the responsibility of the Contractor to contact all affected utility owners and determine the precise locations of all utilities prior to beginning construction. Utility owners shall be contacted a minimum of 48 hours prior to the commencement of operations. Special care shall be used in working around or near existing utilities, protecting them when necessary to provide uninterrupted service. In the event that any utility service is interrupted, the Contractor shall notify the utility owner immediately and shall cooperate with the owner, or his representative, in the restoration of service in the shortest time possible. Existing fire hydrants shall be kept accessible to fire departments at all times.

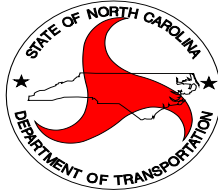
The Contractor shall adhere to all applicable regulations and follow accepted safety procedures when working in the vicinity of utilities in order to assure the safety of construction personnel and the public.

**EROSION, SILTATION, AND POLLUTION CONTROL**

The Contractor shall exercise every reasonable precaution and take all necessary measures throughout the life of the project to prevent erosion, siltation, and pollution in accordance with Section 107-13 of the Standard Specifications. Silt fence and erosion control measures shall be installed in accordance with the plans for this project, Section 1605 of the Standard Specifications, and in locations directed by the Engineer or his representative.

**PLAN, DETAIL AND QUANTITY ADJUSTMENTS**

The Department reserves the right to make, at any time during the progress of the work, such alterations in plans or the details of construction as may be found necessary or desirable by the Engineer to complete the project.



# North Carolina Department of Transportation

## BID FORM

Work Order Number: 12.101813, 12.102313, 12.103613, 12.104913, & 12.105513

Description: LOW-VOLUME, BACKPACK, FOLIAR HERBICIDE APPLICATIONS (SUPPLY AND APPLY)

ITEM	SECT	DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT BID
1	SP	Herbicide Application (APPLY)	250	Crew Hours		
2	SP	Herbicide for "Complete Tree Removal" (Supply)	672	Gallons		
3	SP	Herbicide for "Selective Tree Removal" (Supply)	2688	Gallons		

**NOTE: Contract Quantities Are Approximate And Used For Determining The Lowest Responsible Bidder Only; No Minimum Or Maximum Amount Of Work Is Guaranteed Under This Contract.**

***TOTAL BID FOR PROJECT: \$ \_\_\_\_\_***

CONTRACTOR \_\_\_\_\_

ADDRESS \_\_\_\_\_

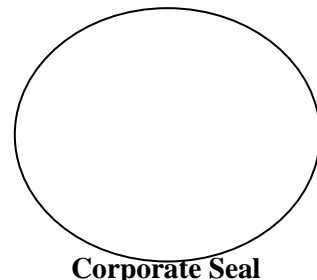
Federal Identification Number \_\_\_\_\_ Contractors License Number \_\_\_\_\_

Authorized Agent \_\_\_\_\_ Title \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Witness \_\_\_\_\_ Title \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_



Corporate Seal

**BID FORM MUST BE SIGNED AND SEALED ON THIS PAGE**