

## ITEM 02615.14 M - PHRAGMITES CONTROL

### Description

The purpose of this work shall be to limit the vegetative spread of common reed *Phragmites australis* into the mitigation area until woody plantings have been well-established. The area to be treated shall be as identified on plan drawings or as directed by the Engineer. Two treatments shall be applied as shown on design plans: 1) the removal of existing topsoil and replacement with topsoil free of noxious weeds followed by seeding of wetland forbs, grasses and sedges and; 2) mowing and herbicide application followed by seeding of wetland grasses.

### Materials

#### **Herbicide:**

Herbicide shall be a commercially available glyphosate-based product that is currently registered by the United States Environmental Protection Agency and the New York State Department of Environmental Conservation. The New York State Department of Environmental Conservation shall be consulted in the selection of the appropriate herbicide and shall determine if a formulation for aquatic application is required. Herbicides shall also have all required labels indicating they are approved for the intended use. Packaging and acceptance shall be as described under NYSDOT specification §713-13 Pesticides.

#### **Topsoil:**

§ 713-01

DISAPPROVED BY  
EI 09-002

#### **Wetland Forb, Grass and Sedge Seed Mix:**

<b>Seed Specification Table</b>		
<b>Common Name</b>	<b>Species</b>	<b>Kilograms of Pure Live Seed Per Hectare</b>
Redtop	Agrostis alba	2
Blue Joint Grass	Calamagrostis canadensis	3
Perennial Ryegrass	Lolium perenne	4
Switchgrass	Panicum virgatum	3
Native wetland seed mix	(see below for requirements)	12
	Total kilograms of pure live seed per hectare	24

## ITEM 02615.14 M - PHRAGMITES CONTROL

### Native Wetland Seed Mix:

Incorporate a minimum of four of the grasses/sedges and 5 of the forbs that are listed below into the mix:

#### Grasses/Sedges

Rice cutgrass (*Leersia oryzoides*)  
Wool grass (*Scirpus cyperinus*)  
Soft stem bulrush (*Scirpus validus*)  
Fox sedge (*Carex vulpinoidea*)  
Soft Rush (*Juncus effusus*)  
Chufa (*Cyperus esculentus*)  
Fowl bluegrass (*Poa palustris*)

#### Forbs

New England aster ( *Aster novae-angliae*)  
Water dock (*Rumex verticillatus*)  
Giant bur-reed (*Sparganium eurycarpum*)  
Blue vervain (*Verbena hastata*)  
Beggars Ticks (*Bidens frondosa*)  
Boneset (*Eupatorium perfoliatum*)  
Joe-pye Weed (*Eupatorium maculatum*)  
Pennsylvania smartweed (*Polygonum pennsylvanicum*)

### Wetland Grass Seed Mix:

Seed Specification Table		
Common Name	Species	Kilograms of Pure Live Seed Per Hectare
Big Blue-stem	<i>Andropogon gerardii</i>	4
Blue Joint Grass	<i>Calamagrostis canadensis</i>	2
Perennial Ryegrass	<i>Lolium perenne</i>	4
Switchgrass	<i>Panicum virgatum</i>	4
River-bank Rye	<i>Elymus riparius</i>	4
Eastern Gamagrass	<i>Tripsacum dactyloides</i>	2
	Total kilograms of pure live seed per hectare	20

### Construction Details

#### **Topsoil Stripping and Removal:**

The Contractor shall strip topsoil from the area as shown in plan drawings to remove the roots and stolons of existing vegetation (primarily common reed, *Phragmites australis*) or as directed by the Engineer or Regional Environmental Coordinator to a depth of 150 mm. Stripped topsoil shall be treated as excess excavation material and disposed of in an approved manner as per NYSDOT specification §203-3.07 Unsuitable Materials & § 203-3.08 Disposal of Surplus Excavated Materials.

## **ITEM 02615.14 M - PHRAGMITES CONTROL**

### **Topsoil Replacement:**

Topsoil shall be placed where existing topsoil has been stripped in conformance with NYSDOT specification section 613. Topsoil shall be spread to a thickness of 150 mm and shall approximate the pre-stripping contours.

A commercially available wetland seed mix containing wetland forb, grass, and sedge seeds shall be applied to the area receiving replacement topsoil as shown on plan drawings or as directed by the Engineer. Wetland forb, grass and sedge seed mix shall be applied as soon as final grading of topsoil has been completed. Wetland seed mix shall be applied at a rate 15 kg per hectare or as directed by the Engineer or Regional Environmental Coordinator.

### **Mowing:**

Common reed shall be mowed twice in the areas specified in plan drawings or as directed by the Engineer or Regional Environmental Coordinator. Common reed shall be mowed to a height of 150 mm or less. The first mowing shall occur in spring 1999, from May 1 through May 31, to remove the existing standing crop of dead stems and early growth. The second mowing shall occur in mid-summer 1999, shortly after common reed begins to flower, as determined by the Engineer or the Regional Environmental Coordinator (July 21 to August 15).

### **Herbicide Application:**

The Contractor, after a two week (minimum) period in time following the mowing, shall apply a herbicide once to the mowed common reed area as shown on plan drawings, during August 1999 (August 1 to August 31) or as directed by the Engineer or Regional Environmental Coordinator. The Regional Environmental Coordinator shall be notified in writing at least three days prior to the application of herbicide. Herbicide shall be applied in a manner and rate (as liters per 1000 m<sup>2</sup>) consistent with manufacturers recommendations. In order to minimize soil compaction, heavy equipment shall not be used.

### **Wetland Grass Seed Mix Application:**

The area of common reed to be mowed and herbicided, as shown in plan drawings, shall be sown with a commercially available wetland grass seed mix. The Contractor shall apply wetland grass seed mix one to two weeks after applying herbicide or as directed by the Regional Environmental Coordinator or Regional Landscape Architect. The wetland grass seed mix shall be applied at a rate of 25 kg per hectare or as directed by the Engineer or Regional Environmental Coordinator.

Seeded areas will be watered to maintain moist soil conditions or as directed by the Engineer or Regional Environmental Coordinator.

### **Method of Measurement**

The work will be measured for payment on a lump sum basis for the work completed in accordance with the contract documents and as ordered by the Engineer.

### **Basis of Payment**

The lump sum price shall include the cost of furnishing all equipment, labor and materials necessary to complete the work in accordance with the contract documents and as ordered by the Engineer.