



NY-ENG-US412a\_1-2  
April 2003  
May 2005

**CONSTRUCTION SPECIFICATIONS AND NOTES**

- The waterway shall be constructed at the location marked in the field.
- All trees, brush, stumps, sod, and other objectionable material shall be legally disposed of so they will not interfere with the construction or proper functioning of the waterway or outlet.
- Where filling is necessary, heavy sod shall be removed. Fill shall not contain vegetation, sod, frozen material, brush, roots, stones larger than (6) inches in diameter, or other objectionable material. Eroded areas shall be sloped and scarified to 1H to 1V (1:1) or flatter to insure bonding with the fill being placed. Fill shall not be placed on frozen surface. Fill shall be placed in uniform layers not to exceed (9) inches prior to compaction. The moisture content of the fill shall be sufficient to obtain firm compaction. Compaction shall be accomplished by the routing of construction equipment over the fill such that the entire surface of each layer will be traversed by not less than (1) track of the construction equipment.
- All earth excavated and not needed in the construction of the waterway shall be spread adjacent to the waterway or shall be disposed of so that it will not interfere with proper functioning of the waterway. All spoil and disposal areas shall be graded smooth and shall be free draining.
- Apply fertilizer at the following rates:  

Nitrogen	30 Lbs./Ac.	_____ Lbs. total
Phosphorus	60 Lbs./Ac.	_____ Lbs. total
Potassium	60 Lbs./Ac.	_____ Lbs. total

Unless otherwise specified, apply seed at the following rates:

Kentucky Bluegrass (Baron or Banff)	15 Lbs./Ac.	_____ Lbs. total
Creeping Red Fescue (Ensyva or Flyer)	15 Lbs./Ac.	_____ Lbs. total
Redtop (Streaker or Barracuda)	3 Lbs./Ac.	_____ Lbs. total
Perennial Ryegrass (Pennfine or Pinnacle)	3 Lbs./Ac.	_____ Lbs. total
White clover (common)	2 Lbs./Ac.	_____ Lbs. total
- An alternative seeding mixture may be applied when authorized by an approving official.
- Apply a mulch of straw or hay at a rate of (2) Tons/Ac.

**TYPICAL PARABOLIC CROSS-SECTION**

**PLAN VIEW**  
*NOT TO SCALE*

B.M. Elev. \_\_\_\_\_  
B.M. Desc. \_\_\_\_\_

Date	_____
Designed	_____
Drawn	_____
Checked	_____
Approved	_____
Title	_____

**GRASSED WATERWAY - 412A**

**USDA** United States Department of Agriculture  
**Natural Resources Conservation Service**

NRCS Drawing Name \_\_\_\_\_  
 NRCS Project ID \_\_\_\_\_  
 9/24/14 11:12 AM  
 Sheet \_\_\_\_\_ of \_\_\_\_\_

**DESIGN RECORD**

Station	_____ to _____				
Length					
Grade %					
Top width (T)					
Depth (D)					
Peak discharge (CFS)					
Velocity (V)					
* Normal depth (capacity)					

**ALTERNATE SIZE**

Top width (T)					
Depth (D)					

Soil type(s) \_\_\_\_\_ Permissible velocity (V<sub>p</sub>) \_\_\_\_\_ ft/sec

Retardance \_\_\_\_\_ D \_\_\_\_\_ for velocity Retardance \_\_\_\_\_ for capacity

\* Optional – for use with NEH-5 computer program

Type of outlet (describe) \_\_\_\_\_

Engineering survey notes attached? Yes [ ]

Notes

Layout by: \_\_\_\_\_

Date: \_\_\_\_\_

**PERFORMANCE RECORD (As Built)**

Station	_____ to _____				
Constructed length					
Constructed grade %					
Minimum constructed top width					
Minimum constructed depth					
Constructed capacity (CFS)					
Constructed velocity					
* Normal depth (capacity)					

Layout Sketch (if not on engineering notes)

Check notes attached? Yes [ ] Seeding established? Yes [ ]

Quantities checked by: \_\_\_\_\_ Date: \_\_\_\_\_

I hereby certify that this practice complies with the plans and specifications established for this job, with the following exceptions:


Performance checker: \_\_\_\_\_

Date: \_\_\_\_\_

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