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# ENGINEERING INSTRUCTION

NEW YORK STATE DEPARTMENT OF TRANSPORTATION

SUPERSEDED BY EI 94-025  
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ITEM 16607.0611 - PROTECTIVE  
SCREENING - BRIDGES

Subject Code: 7.27-1-607

7.35-6-607

Distribution:

31 Main Office

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Code: EI 83-5

Date: January 20, 1983

APPROVED:



E.V. HOURIGAN, Deputy Chief Engineer (Structures)

Supersedes:

Attached to this Engineering Instruction is a copy of Item 16607.0611:  
PROTECTIVE SCREENING-BRIDGES.

This item updates and replaces Item 15607.061001 - PROTECTIVE SCREENING FOR BRIDGE (STEEL CHAIN LINK FENCE-ALUMINUM COATED). The updating consists entirely of changes to the MATERIALS subsection. This subsection has been altered to reflect the requirements of subsection 710-10.02. Subsection 710-10.02 is an expansion of subsection 710-10.01. Subsection 710-10.02 may be found in Addendum No. 1.

Item 16607.0611 will be stocked as a Main Office insert.

The change will become effective with the letting of May 19, 1983  
(P.S. & E. 2/24).



ITEM NO. 16607.0611 - PROTECTIVE SCREENING-BRIDGES

DESCRIPTION:

The work shall consist of furnishing and installing protective screening, including all hardware and construction systems necessary to complete the work. Protective screening shall be installed according to the details and at the locations indicated on the Contract Plans.

MATERIALS:

Materials used for this work shall conform to the following requirements:

<u>PART</u>	<u>REQUIREMENTS</u>
Steel Fence Fabric (Aluminum Coated)	710-04
Posts, Rails, Braces, and Fittings	710-10.02
Angles and Plates	ASTM A 36
U-Bolts	ASTM A307
Nuts and Bolts	ASTM A307
Pipe Supports	ASTM A 53
Anchor Bolts	ASTM A449

All material, except fence fabric, shall be galvanized. Unless otherwise specified, galvanizing shall be in accordance with the requirements of Subsection 719-01, type as applicable.

All edges of the fence fabric shall be "knuckled" (wire ends bent back upon themselves to eliminate sharp wire ends).

Unless otherwise noted on the plans:

1. Posts shall be a nominal 2 1/2" size (2.875" O.D.). Minimum weight per foot shall be 5.79 lbs. for Schedule 40 Pipe and 4.64 lbs. for Class B Steel Tubing.
2. Top and Bottom rails shall be a nominal 1 1/4" size (1.66" O.D.). Minimum weight per foot shall be 2.27 lbs. for Schedule 40 Pipe and 1.83 lbs. for Class B Steel Tubing.
3. Pipe supports shall be 1 1/2" nominal size Schedule 80 Pipe.

CONSTRUCTION DETAILS:

Fence fabric shall be firmly attached to the posts, rails, and braces. All wire shall be stretched taut and be installed to the required elevations.

The posts shall be fastened to the structure in accordance with the details indicated on the Contract Plans. Fence posts shall be set so that they are truly vertical.

All the top rails shall pass through the base of the post caps and shall form a continuous brace from end-to-end of each stretch of fence fabric. Top rail lengths shall be joined with sleeve couplings. At expansion joints of the structure, expansion sleeves shall be used. Top rails shall be securely fastened to terminal posts by means of rail end connectors approved by the Engineer. Horizontal braces shall be provided at all terminal posts, midway between the top and bottom rails, and shall extend from the terminal post to the first adjacent intermediate post. Braces shall be securely fastened to the intermediate posts by brace ends and brace bands. Braces shall be securely fastened to the terminal posts by rail end connectors, approved by the Engineer. Braces shall be made from the same material as the top and bottom rails.

All welding shall meet the requirements of Section 203, Welding, of the New York State Steel Construction Manual.

Field welding shall be allowed only where indicated on the Contract Plans, or where ordered by the Engineer.

All finished surfaces of welds, and surfaces from which the galvanizing has been removed, shall be repaired in accordance with the requirements of Subsection 719-01. Any galvanizing repair shall be done at the Contractor's expense.

Unless otherwise noted on the plans:

1. The fabric shall be securely fastened to all terminal posts by 1/4" x 3/4" tension bars with 11 gauge pressed steel bands spaced approximately 14 inches apart.
2. Fabric shall be attached to top and bottom rails with 6 gauge tie wires at 2-foot centers.
3. The fabric shall be securely fastened to all vertical posts by 6 gauge aluminum ties at 12" centers.
4. If a tension wire is required by the Contract Documents, the fabric shall be attached to it with 6 gauge aluminum ties.

METHOD OF MEASUREMENT:

Measurement will be taken as the number of linear feet of protective screening installed.

Measurement will be taken along the bottom of the bottom rail, center-to-center to terminal posts.

BASIS OF PAYMENT:

The unit price bid per linear foot shall include the cost of furnishing all labor, materials, and equipment necessary to complete the work.