

# Special Specification 4151

## Railroad Ballast Protection Wall



### 1. DESCRIPTION

Furnish and install railroad ballast protection wall.

### 2. MATERIALS

Furnish certification from the materials manufacturer stating that all fencing materials comply with the requirements of this Item before installation of the fence. Use only new materials.

2.1. **General.** Furnish materials in accordance with the following:

- Item 445, "Galvanizing"

2.2. **Flattened Expanded Metal Galvanized Fencing.** Provide  $\frac{3}{4}$ ", 9 gauge, flattened expanded galvanized metal.

2.3. **Posts.** Use existing railroad railing posts for the ballast protection wall. Check existing posts for damage or excessive wear before ballast wall installation.

2.4. **Miscellaneous Fittings and Fasteners.** Furnish enough fittings and fasteners to erect all fencing materials in a proper manner. Furnish fittings for posts from pressed or rolled steel, forged steel, malleable iron or wrought iron of good commercial quality.

2.5. **Galvanizing.** Hot-dip galvanize in accordance with ASTM A123.

2.5.1. **Fittings, Bolts, and Other Miscellaneous Hardware.** Galvanize all fittings, bolts, and miscellaneous hardware in conformance with Item 445, "Galvanizing."

### 3. CONSTRUCTION

Erect the ballast protection wall to the lines, elevations, and dimensions established on the plans.

Repair or replace any existing damaged fence. Remove and replace the post if posts cannot be repaired by straightening. Dispose of unsalvageable material.

3.1. **Posts.** Repair any existing damaged or excessively worn posts. Remove and replace the posts if posts cannot be repaired by straightening. Dispose of unsalvageable material.

3.2. **Erection of Fencing.** Place the flattened expanded metal fencing after all posts and anchorages have been inspected. Secure one end and apply enough tension to the other end to remove all slack before making attachments. Cut the fencing and attach at all posts. The flattened expanded metal fencing can be either welded or bolted to the posts. The fencing should be attached to each post in at least 2 evenly spaced locations. The bottom edge of the fencing should meet the concrete of the railroad bridge to eliminate any ballast passing underneath the ballast protection wall. Install the fencing on both sides of the railroad bridge as shown in the plans.

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4. **MEASUREMENT**

Ballast protection wall will be measured by the foot of fence installed.

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5. **PAYMENT**

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Railroad Ballast Protection Wall (Install)" of the height specified.

- 5.1. **Ballast Protection Wall (Install).** This price is full compensation for furnishing and installing fencing, removing and disposing of surplus material; and equipment, labor, tools, and incidentals.