



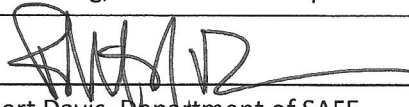

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Washington Metropolitan Area Transit Authority  
600 5th Street, NW  
Washington, DC 20001

## SPECIFICATIONS PACKAGE

### 8'6" and 10' Wood Crossties

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**TABLE OF CONTENTS**

**1 SCOPE..... 3**

**2 APPLICABLE DOCUMENTS..... 3**

**3 TECHNICAL SPECIFICATIONS ..... 3**

**4 INSPECTION, TESTING, AND ACCEPTANCE..... 5**

**5 WARRANTY ..... 5**

**6 DELIVERY AND INSPECTION ..... 6**

# **1 SCOPE**

## **1.1 SUMMARY**

- 1.1.1 This package includes all labor, materials, and equipment for the fabrication, testing, and delivery of 8'6" and 10' wood crossties to be installed in the WMATA rail system.

# **2 APPLICABLE DOCUMENTS (MOST CURRENT VERSION)**

## **2.1 GENERAL REQUIREMENTS**

- 2.1.1 AREMA Manual for Railway Engineering
- 2.1.2 AREMA Portfolio of Trackwork Plans
- 2.1.3 AREMA Manual for Railway Engineering
- 2.1.4 AREMA Portfolio for Trackwork Plans
- 2.1.5 AREMA Specifications for Crossties
- 2.1.6 AREMA Specifications for Preservatives
- 2.1.7 AREMA Specifications for Treatment
- 2.1.8 AREMA Records of Treatment and Reports of Inspection
- 2.1.9 APWA Standard C6
- 2.1.10 AWPA Standard M3

# **3 TECHNICAL SPECIFICATIONS**

### **3.1 CROSSTIES AND CONTACT RAIL CROSSTIES:**

- 3.1.1 All crossties shall be new.
- 3.1.2 Physical requirements shall be in accordance with the AREMA manual, except as modified.
- 3.1.3 All crossties shall be of oak wood species.
- 3.1.4 Crossties shall be sawed on top, bottom and both sides.
- 3.1.5 Free of checks over two inches deep or extending more than eight inches from the end of the crosstie.
- 3.1.6 AREMA 7" Grade.
  - 3.1.6.1 Crosstie anti-splitting devices include nail plates in accordance with the AREMA Manual, except as modified herein:
  - 3.1.6.2 Minimum size 5 1/2 inches x 7 inches.
  - 3.1.6.3 Nail plates shall be installed by a method or machine that presses them into the end of the crosstie. Hammer installation of nail plates is not allowed and will be a cause for rejection of the crossties.
  - 3.1.6.4 Incise all sides prior to treatment to a depth of 3/4 inch. Thickness of incisor teeth shall not exceed 7/32 inch.
  - 3.1.6.5 Free of knots greater than 1/2 inch diameter for areas indicated in the AREMA Manual.
- 3.1.7 Crossties:
  - 3.1.7.1 Length: eight (8) feet, six (6) inches.
  - 3.1.7.2 Straightness: A crosstie will be considered straight when a line along the tip from the middle of one end to the middle of the other end is everywhere more than 2 3/4 from both sides.
- 3.1.8 Contact Rail Crossties:
  - 3.1.8.1 Length: Ten (10) feet.
  - 3.1.8.2 Free of knots greater than 1/2 inch diameter in the area of the contact rail insulator, i.e., 100 to 110 inches from line end.
  - 3.1.8.3 AREMA size five (5) apply to contact rail insulator area.
  - 3.1.8.4 Straightness: A contact rail crosstie will be considered straight when a line along the tip from the middle of one end to the middle of the other end is everywhere more than two inches from both sides.

3.1.9 Preservative Treatment:

- 3.1.9.1 Crossties shall be treated in accordance with the requirement of AWPA Standard C6/T1 and M3 for crossties and contact rail crossties. Conditioning prior to treatment shall be in accordance with Paragraph 3.2, Boulton Drying Process, of the above standard.
- 3.1.9.2 Immediately following conditioning, the ties shall be pressure treated in accordance with AREMA Chapter 30 and AWPA standard C6.
- 3.1.9.3 Use only tested and approved preservatives including creosote-type preservatives. Stamp each treated crosstie to indicate compliance with these specifications. Complete AREMA or AWPA forms for treatment of crossties.

## **4 INSPECTION, TESTING, AND ACCEPTANCE**

### **4.1 INSPECTION AND ACCEPTANCE TESTING**

4.1.1 Vendor Shall submit the following documentations prior to WMATA's acceptance:

- 4.1.1.1 Proposed anti-splitting devices and location in crosstie.
- 4.1.1.2 Proposed manner of marking treated crossties to indicate compliance with specifications.
- 4.1.1.3 Certificate of compliance with AWPA Standard M3 for crosstie treatment.
- 4.1.1.4 All treated crossties shall be subject to inspection under all associated specifications by WMATA personnel at the vendors site no later than 10 days prior to the delivery date and/or delivery and unloading at the designated WMATA storage facility.

## **5 WARRANTY**

### **5.1 MATERIALS AND WORKMANSHIP**

- 5.1.1 There shall be a one (1) year warranty on all materials and workmanship. See Chapter III, Provision 5 'Warranty' for additional warranty provisions.
- 5.1.2 WMATA will inspect the materials after delivery to determine that they are of proper quantity and they are in satisfactory condition on arrival. Final acceptance will be based upon the crossties complying with the WMATA/AREMA specifications, based on the results of the quality control tests and the certified statements submitted to WMATA by the Vendor.

## 6 DELIVERY AND INSPECTION

### 6.1 DELIVERY INSTRUCTIONS

6.1.1 Wood crossties shall be delivered to:

WMATA Auth Road Material Storage Facility  
4305 Auth Place  
Suitland, MD 20746

WMATA Industrial Road Material Storage Facility  
6851 Industrial Road  
Springfield, VA 22151

Alternate locations within the WMATA rail system (DC, MD, VA)

Deliveries shall coincide with the dates indicated in the Price Schedule, and shall commence no later than (45) calendar days after NTP. Hours of delivery shall be between 7:00 am and 2:00 pm Monday through Friday, exclusive of legal holidays in the Washington, DC area. The Vendor shall notify WMATA of material deliveries (48) hours in advance. The supplier shall contact Ms. Kimberly Hammond at (202) 253-4127 for instructions.

- 6.1.2 The Vendor shall secure each bundle of crossties to avoid shifting while transport, with one metal band on each end. Crossties shall be bundled, and of sufficient weight, to allow unloading by a standard forklift.
- 6.1.3 All deliveries must include a detailed Bill of Lading.
- 6.1.4 Wood crossties shall not be stored by the Vendor in a wet location.
- 6.1.5 WMATA staff will inspect all crosstie deliveries upon receipt. The Vendor shall replace crossties within (14) calendar days of rejection notice when they have been damaged during packaging, pre-delivery storage, shipping, or if they do not meet specification. WMATA will not incur any additional cost for replaced crossties