

PLAN NO. BR-20-86

ITEM 511 - CLASS S CONCRETE, SUPERSTRUCTURE, AS PER PLAN

THIS ITEM SHALL CONSIST OF FURNISHING AND PLACING PORTLAND CEMENT CONCRETE IN ACCORDANCE WITH 511 WITH THE FOLLOWING ADDITIONS:

- 1. ALL EXISTING CONCRETE SURFACES THAT WILL BE IN CONTACT WITH CLASS S CONCRETE SHALL BE THOROUGHLY SANDBLASTED AND AIR CLEANED.
- 2. BEFORE THE PLACEMENT OF THE CONCRETE, ALL OF THE EXISTING CONCRETE SURFACES MENTIONED ABOVE SHALL BE COATED WITH A TWO-COMPONENT EPOXY BONDING AGENT. THE BONDING AGENT SHALL CONFORM TO AASHTO M-235-73I, CLASS III. BONDING MATERIAL SHALL BE MIXED AND PLACED PER MANUFACTURER'S RECOMMENDATIONS.

ITEM 516 - VERTICAL EXTENSION OF STRUCTURAL EXPANSION JOINTS, AS PER PLAN

- I. DESCRIPTION: THIS ITEM SHALL INCLUDE ALL WORK REQUIRED TO REMOVE PORTIONS OF STRUCTURES IN CURBS, SIDEWALKS, AND PARAPETS AT LOCATIONS AND AS DETAILED IN THESE PLANS, PROVIDE AND INSTALL IN THE ROADWAY AND SIDEWALKS ALL STUDS, STEEL PLATES, STEEL BARS, BOLTS, STEEL EXTRUSIONS, NEOPRENE STRIP SEAL, AND ANY ADDITIONAL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THIS WORK.
- II. MATERIALS: THE JOINT SYSTEM SHALL BE WABO STRIP SEAL CONSISTING OF TYPE E STEEL EXTRUSIONS AND A SE-300 NEOPRENE STRIP SEAL AS MANUFACTURED BY WATSON BOWMAN & ACME CORPORATION, 95 PINEVIEW DRIVE, AMHERST, NEW YORK 14120, AND HAS A TELEPHONE NUMBER OF (716) 691-7566, OR AN APPROVED EQUAL. AN ADHESIVE SHALL BE USED TO FACILITATE PLACEMENT OF THE NEOPRENE EXTRUSION. ALL MATERIALS SHALL BE STORED AND INCORPORATED IN THE WORK AS RECOMMENDED BY THE MANUFACTURER. A MANUFACTURER'S REPRESENTATIVE SHALL BE PRESENT AT THE JOB SITE UNTIL SUCH TIME AS HE AND THE ENGINEER ARE SURE THAT THE CONTRACTOR IS QUALIFIED IN ALL ASPECTS OF JOINT SEALING.

PHYSICAL PROPERTIES:

- 1. THE STEEL EXTRUSION SHALL CONFORM TO ASTM A242, A36, OR A588.
- 2. THE ADHESIVE SHALL BE A ONE-PART MOISTURE CURING POLYURETHANE AND HYDROCARBON MIXTURES AS DISTRIBUTED UNDER THE TRADE NAME BONILASTIC BY WATSON BOWMAN AND ACME HIGHWAY PRODUCTS; OR AN APPROVED EQUAL.
- 3. THE NEOPRENE EXTRUSION SHALL CONFORM TO THE PHYSCIAL PROPERTIES SPECIFIED FOR AASHO M220 EXCEPT FOR THE RECOVERY TEST.
- 4. SET SCREWS FOR FASTENING THE SPLIT EXTRUSIONS SHALL BE STAINLESS STEEL.
- III. INSTALLATION: THE CONTRACTOR SHALL INSTALL STEEL EXTRUSIONS IN MAXIMUM LENGTHS TO MINIMIZE WELDED BUTT JOINTS. AFTER ALL OTHER WORK ON THE STRUCTURE IS COMPLETE, THE CONTRACTOR SHALL SANDBLAST CLEAN THE STEEL EXTRUSION SURFACES WHICH WILL CONTACT THE NEOPRENE GLAND. AFTER AN AIR BLAST AND APPLICATION OF THE ADHESIVE, THE CONTRACTOR SHALL INSTALL THE NEOPRENE GLAND. THE NEOPRENE GLAND SHALL BE ONE CONTINUOUS PIECE ACROSS THE ROADWAY AND SIDEWALKS.
- IV. METHOD OF MEASUREMENT: FOOTAGE UNDER THIS ITEM SHALL BE THE LINEAR FEET OF STRIP SEAL MEASURED ALONG THE CENTERLINE OF THE NEOPRENE EXTRUSION COMPLETE, INSTALLED AND ACCEPTED BY THE ENGINEER.

V. BASIS OF PAYMENT: THE ACCEPTED QUANTITIES OF SEALED JOINTS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAR FOOT, WHICH PRICE AND PAYMENT SHALL BE FULL COMPENSATION FOR ALL NECESSARY REMOVALS, FURNISHINGS AND PLACING ALL MATERIALS, AND ALL LABOR AND EQUIPMENT NECESSARY TO COMPLETE THE SEALING OF EXPANSION JOINTS ON THE ROADWAY AND SIDEWALKS AS SHOWN IN THESE PLANS. PAYMENT WILL BE MADE UNDER THE FOLLOWING:

ITEM

UNIT

DESCRIPTION

516

LINEAR FOOT

VERTICAL EXTENSION OF STRUCTURAL EXPANSION JOINTS. AS PER PLAN. #1 OR #2

ITEM 845 - LATEX MODIFIED CONCRETE OVERLAY (1-3/4 INCHES THICK)

THIS ITEM SHALL BE IDENTICAL TO ITEM 845 - LATEX MODIFIED CONCRETE OVERLAY (1-1/4 INCHES THICK) EXCEPT THAT ALL REFERENCE TO LMC OVERLAY (1-1/4 INCHES THICK) SHALL BE CONSIDERED TO READ LMC OVERLAY (1-3/4 INCHES THICK).

TYING REBARS

THE PURPOSE OF THIS ITEM IS TO TIE EXPOSED STEEL REINFORCING BARS WHICH ARE IN CROSS CONTACT OR LAPPED. TACK WELDING SHALL NOT BE PERMITTED. THIS WORK SHALL BE PERFORMED WHERE AND AS DETERMINED BY THE ENGINEER TO RESTRICT THE RELATIVE MOVEMENT OF THE REINFORCING BARS.

PAYMENT FOR THIS WORK INCLUDING EXTRA REMOVAL OF CONCRETE AS REQUIRED TO PERMIT TYING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE LATEX MODIFIED CONCRETE OVERLAY.

ITEM SPECIAL - PAVEMENT PLANING, BITUMINOUS, WITHOUT HEAT

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER TO REMOVE EXISTING ASPHALT CONCRETE ON THE APPROACH PAVEMENT AS REQUIRED TO PROVIDE A SMOOTH TRANSITION IN ACCORDANCE WITH BP-5.

ITEM SPECIAL - PAVEMENT PLANING, BITUMINOUS, WITHOUT HEAT

150 sq. yds.

ITEM 520 - PNEUMATICALLY PLACED MORTAR

THIS ITEM SHALL BE USED TO PATCH DETERIORATED CONCRETE SURFACES ON PIER #1 AND PIER #2 INCLUDING THE CAPS AND STEMS TO THE WATERLINE.