

ERRATA AND CHANGES

Payment Bond. Article 1.17, 1.20 and 2.4 of FR-50-1935. In lieu of the performance bond in the amount of 100 percent of the total amount bid for the work awarded, a performance bond in the amount of 50 percent of the total amount bid for the work awarded is required, together with payment bond in the amount of 50 percent of the said total amount.

Page 10. Article 4.5 Funds Programmed. Revise the first phrase of the first sentence to read: In case this contract shall leave available any portion of the funds programmed for the construction of this project.

Page 11. Article 4.6. Revise the second sentence to read: All expense of construction and maintenance for the accommodation of traffic shall be the obligation of the contractor without direct compensation except insofar as provided under "Special Detours;" provided, however, that in case of suspension of the job, through no fault of the contractor, for the practical duration of the winter season, and involving cessation of work on all but minor items, emergency work and expense of the character and for the purpose set out in (1) below, when performed as ordered by the engineer in writing, and necessary for the maintenance of public traffic over those portions of the highway where the contractor has not initiated construction operations, may be paid for as provided under Article 9.4 from the contingent sum set up in the Bid Schedule therefor upon issuance of "Work Orders."

Page 14. Article 6.3. In the fourth paragraph revise the first phrase to read: The ball of roots or balled and burlapped (B & B) plants - - -.

Add the following clause at the end of the paragraph:

Page 14. Article 7.1. The contractor shall secure workmen's compensation insurance in accordance with the requirements of the laws of the State in which the work is to be performed in case the constituted authority of such State shall apply such laws to this project. In the event such insurance is not so made to apply to this project, the contractor shall provide workmen's compensation insurance equal at least to that required by the laws of the State wherein the work is to be performed. In those States where there are no workmen's compensation laws the contractor shall provide workmen's compensation insurance equal to that ordinarily carried for work of this kind performed for the United States Government in that section of the country, which insurance shall be subject to the approval of the engineer and shall provide for payments to workmen in case of temporary or permanent disability resulting from the work provided for herein and for payments to their dependents in case of death.

Page 24. Article 8.6. Determination of Contract Time for Completion, Extensions and Allowances. Revise the third sentence of the first paragraph to read as follows: No time allowance will be granted as a result of partial suspension. In case of total suspension not due to any fault of the contractor, including total suspension due to unsuitable weather conditions, the interval between effective dates of order to suspend operations and order to resume work will not be charged against the contractor in computing the number of calendar days allowed for completion of the contract. During periods of total suspension of work, the contractor shall execute such work of emergency character for the convenience of public traffic as is ordered by the engineer, and may prosecute operations not affected by the cause of suspension if authorized by the engineer to do so, and such authorization shall not operate to change the status of suspension of the job.

Page 32. Article 20-4.1 Add the following paragraph 4.1(d) to article 20-4.1:

-4.1(d) Provided, however, that where the Bid Schedule calls for bidding for clearing per acre, paragraphs 20-4.1(a), (b) and (c) are void and the area of "Clearing" to be paid for shall be the number of acres, and fractions thereof, of land cleared as ordered in accordance with the specifications within the limits designated by the engineer for "clearing."

Page 32. Article 20-5.1. Basis of Payment. Revise to read: The number of "clearing units" or acres, determined as provided above, shall be paid for at the contract unit price per "clearing unit" or per acre, as the case may be, bid for "Clearing," which price and payment shall constitute full compensation for all labor, equipment, tools and incidentals necessary to complete the item.

Page 33. Article 21-4.1. Add the following paragraph -4.1(e) to article 21-4.1:

-4.1(e) Provided, however, that where the Bid Schedule calls for bidding for grubbing per acre, paragraphs 21-4(a), (b), (c) and (d) are void and the area of "Grubbing" to be paid for shall be the number of acres, and fractions thereof, of land grubbed as ordered in accordance with these specifications within the limits designated by the engineer for "Grubbing."

Page 33. Article 21-5.1. Basis of Payment. Revise to read: The number of "grubbing units" or acres, determined as provided above, shall be paid for at the contract unit price per "grubbing unit" or per acre, as the case may be, bid for "Grubbing," which price and payment shall constitute full compensation for all labor, equipment, tools and incidentals necessary to complete the item.

Articles 110-4.1, 111-4.1, 112-4.1, 113-4.1, 114-4.1, 115-4.1 and 116-4.1. Change the reference to A.S.T.M. Specification D 208-34 to read: A.S.T.M. Specification D 206-34.

Page 248. Item 253. Bituminous Coated Corrugated Sheet Metal Pipe. Revise to read: Bituminous Coated Corrugated Sheet Metal Pipe Type 1. Revise the pay name in Article 253-5.1 to read: "Bituminous Coated Corrugated Sheet Metal Pipe Type 1."

Page 250. Insert new Item 254 Bituminous Coated Corrugated Sheet Metal Pipe Type 2.

254 BITUMINOUS COATED CORRUGATED SHEET METAL PIPE TYPE 2

254-1.1 Description. This item shall consist of furnishing bituminous coated sheet metal pipe, conforming to these specifications and of the sizes and dimensions required on the plans, and installing such pipe at such places as are designated on the plans or by the engineer and in conformity with the lines and grades given.

This item shall include the furnishing and construction of such joints and such connections to existing pipes, catch basins, and walls, etc., as may be required to complete the work as shown on the plans.

-2.1 Materials and Manufacture. Performance Specification. The bituminous coated pipe shall conform to all the requirements of the specifications hereinbefore for Corrugated Galvanized Sheet Metal Pipe, and in addition shall be completely coated inside and out with an asphalt cement, which will meet the performance requirements set forth herein.

The asphalt cement shall be 99.5 percent soluble in Carbon Bisulphide.

Thickness of Coating. The pipe shall be coated uniformly to a minimum thickness of .03 inch. The thickness shall be measured on the crests of the corrugations.

The asphalt cement shall adhere to the metal tenaciously; shall not chip off in handling; and shall protect the pipe from deterioration, as evidenced by meeting the following tests successfully:

-2.2 Stability Test. The asphalt cement shall not lose its stability when subjected to the highest summer temperature, as indicated by withstanding the following test successfully.

Parallel lines shall be drawn along the valleys of the corrugations of a representative sample of coated pipe and the specimen placed on end in a constant temperature oven, with the parallel lines in a horizontal position. The temperature of the specimen shall be maintained within 2° F. of 150° F. for a period of four hours. At the end of this time no part of any line shall have dropped more than one-fourth inch.

-2.3 Imperviousness Test. The asphalt cement shall be impervious to liquids as indicated by the following test.

A 25 percent solution of sulphuric acid, or a 25 percent solution of sodium hydroxide, or a saturated salt solution (such as sodium chloride) shall be held in the valley of a corrugation for a period of 48 hours, during which time no loosening or separation of the bituminous material from the galvanizing shall have taken place.

-2.4 Erosion Test. A representative sample consisting of a two-foot length of a fully coated pipe (with ends closed by suitable bulkheads) shall be revolved end over end about its transverse axis at a speed of 3.7 revolutions per minute and in such a manner that the erosive charge shall alternately roll along the inner surface of opposite sides of the pipe. At least 75 percent of the sample shall be immersed, as it revolves, in a bath of water maintained at a temperature of 50^o-55^oF. The pipe shall not show areas of bare metal more than two inches in length on four of the seven central corrugations after five hours of continuous testing. The erosive charge shall be 50 pounds of grade B building brick, conforming to the requirements of the A.S.T.M. Serial Designation C62-30, broken up into pieces two or three inches in diameter and three gallons of water.

-3.1 Installation. The subsection of the same heading under the specifications herein for "Corrugated Galvanized Sheet Metal Pipe" shall apply and govern for the asphalt protected pipe. During installation, the asphalt protected pipe shall be handled without damaging the asphalt coating.

-4.1 Method of Measurement. The footages to be paid for shall be the actual number of linear feet of pipe of the several sizes installed in place, completed and accepted. The measurement shall be from end to end of the whole culvert in place, as terminated by the end finish.

-5.1 Basis of Payment. The footages determined as provided above shall be paid for at the contract unit prices per linear foot bid for "Bituminous Coated Corrugated Sheet Metal Pipe Type 2" of the several sizes, as the case may be, which prices and payments shall constitute full compensation for furnishing the asphalt protected pipe, hauling and installing the pipe, and for all materials, labor, equipment, tools and incidentals necessary to complete the item, but shall not constitute payment for concrete or masonry headwalls or for excavation.

Page 250. Revise Item 254, Vitrified Clay Pipe to read: "Item 255, Vitrified Clay Pipe."

Bid Schedule. On pages K and L revise Items 253 (1), 253 (2), 253 (3), 253 (4), 253 (5), and 253 (6) to read:

Lin. ft. ___ inch Bit. Coated Corr. Sheet Metal
Pipe Type 1 at
per lin. ft.

After Item 253 (6) insert Items 254 (1), 254 (2), 254 (3), 254 (4), 254 (5), and 254 (6) as follows:

Lin. ft. ___ inch Bit. Coated Corr. Sheet Metal
Pipe Type 2 at
per lin. ft.

Change Item Nos. 254 (1), 254 (2), 254 (3), and 254 (4) to 255 (1), 255 (2), 255 (3), and 255 (4).

GENERAL SPECIFICATION FR-50 1935

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