Janet T. Mills

STATE OF MAINE DEPARTMENT OF TRANSPORTATION 16 STATE HOUSE STATION AUGUSTA, MAINE 04333-0016

Bruce A. Van Note

May 9, 2024

Subject: UV Cured in Place Pipe Liner

State WIN: 026368.00 Location: **Lexington Amendment No. 2**

Dear Sir/Ms.:

The following questions have been received:

Question: Was this specification supposed to be for Glass Reinforced Plastic (GRP) like Channeline or similar? The reason I ask is because the proposed liner inside dimensions are called out as 68" span x 35" rise; which is exactly the dimensions that we had given design for the GRP profile.

Response: The existing pipe dimensions are 43" x 75" x 45' and a CIPP application will minimally narrow the opening. For permitting purposes, we used the proposed dimensions.

Question: If this is indeed supposed to be Cured in Place (CIPP); what design methodology was used to calculate the wall thickness? I see the reference to "fully deteriorated". However, the only empirical method for calculating CIPP for a non-circular shape would be to use MOP 145 by ASCE. And at that point, I do not know how you get this liner to take this geometry successfully in construction.

Response: The Contractor shall submit design calculations to include wall thickness of the proposed pipe liner for acceptance by the Department. In the Bid Book refer to Special provision UV Cured in Place Pipe Liner Page 41, Submittals, "The Contractor shall submit assembly drawings, design calculations, pipe insertion method, manufacturers' specifications and product data of the fabric tube, resin, end seals and UV curing system. The Contractor shall field measure the existing pipe and shall immediately notify the Department if the proposed pipe may not fit. The Contractor is responsible for field measurement of the existing culvert pipe to ensure proper fit of the liner. No payment will be made for pipe that does not fit because of failure to verify field conditions."

Question: If CIPP, are the voids being filled before liner insertion or after?

Response: The intent is to fill voids prior to liner insertion.

Question: If CIPP, can the Glass Reinforced Plastic (as initially proposed and matches the dimensions desired), be considered an equal alternate option for bidding purposes?

Response: Yes, Glass Reinforced Plastic will be considered an equal alternate option.

Consider these changes and information prior to submitting your bid on May 15, 2024.

Sincerely,

George M. A. Macdougall P.E.

Contracts & Specifications Engineer

Kay Wachagell