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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
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Bruce A. Van Note
COMMISSIONER

April 2, 2019
Subject: Casco Bay Bridge Lighting
Improvements
State WIN: 021890.00
Location: **Portland & South Portland**
Amendment No. 2

Dear Sir/Ms.:

The following question has been received:

Question: The aluminum pole does not meet the requirements of high mast and the associated fatigue resistant design criteria. If this is not applicable and the poles do not have to meet high mast standards despite the height above mean tide the aluminum poles are appropriate. Can you confirm?

Response: The poles on the Casco Bay Bridge are not intended to be designed as high mast structures. Aluminum poles are intended, as stated in the plan notes. The applicable portion of the specification is:

Light Standards with a luminaire mounting height of 55 feet or less shall be designed using the following criteria:

- Basic wind speeds based on a 700-year mean recurrence interval
- Kz as specified in Table C3.8.4-1 (Height and Exposure Factors)
- Kd as specified in Table 3.8.5-1 (Directionality Factors)
- G as 1.14, minimum (Gust Factor)
- Cd as specified in Table 3.8.7-1 (Wind Drag Coefficients)
- Fatigue analysis is not required

For purposes of pole design and analysis, the value of height 'z' in Table C3.8.4-1 of the AASHTO LRFD Specifications should be assumed to be 79 feet above mean high tide as stated in Note 14 on Sheet 3 of the project plans, resulting in a Kz value of 1.20 for calculation of wind loading.

Consider these changes and information prior to submitting your bid on **April 3, 2019**.

Sincerely,

George M. A. Macdougall P.E.
Contracts & Specifications Engineer