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 ADDENDA No. 1.
 

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OTTAWA, 2nd May, 1879.

Since my examination before this honorable Committee, I have read the evidence of Mr. Fleming, Chief Engineer of the Canadian Pacific Railway, and of Mr. Marcus Smith, acting Chief Engineer in Mr. Fleming's absence.

The contracts under consideration were let as schedule contracts, that is to say, at prices per cubic yard, or according to known standards of measurement, the quantities of each kind of work having to be determined by actual measurement. The prices for Contract 15, applied and extended according to the quantities in the bill of works for the above section, amounted to about \$1,594,000.

On the 11th March, 1870, Mr. Marcus Smith forwarded for payment Certificate No. 275, above his signature, stating that on Section 15, Canadian Pacific Railway, the contractor had executed work and delivered materials "under his contract without extras" to the value of \$1,279,972.

The quantities set forth in the bill of works by which the selection of the tenders was determined were stated to be approximate.

It is desirable that such quantities should be as accurate as possible. The most important consideration is that the Government should know exactly the cost of any proposed work. If the quantities are correct, or nearly so, there is likewise more certainty that the lowest tender will be known.

But, apart from these two considerations, there are equal objections to an exaggerated as to an insufficient estimate of a proposed work. If a close adherence to the quantities used in the comparison of tenders were made the criterion whether or no the works had been successfully carried out, the engineer making an insufficient estimate will naturally endeavor to keep the expenditure within the limit.

On the other hand, the engineer who makes an over-liberal estimate, will feel no restraint, and will be inclined to perform work in excess of positive requirement. Moreover, there is the temptation to execute work of a higher character than is called for.

The great cost of the railway through the rock belt of 80 miles, of which Section 15 is a portion, has often formed the subject of consideration by the Department.

During the past year it has been verbally stated by the engineers of the Department that on Sections 14 and 15 the quantities given in the bills of works would be considerably exceeded by the quantities of the work when executed. This excess, however, will in no way be owing to extra work. With the exception of a tunnel on Section 25, the Department has given no orders for extra works on either of the four Sections, 14, 14, 15 and 25.

In May, 1878, Mr. Fleming forwarded a communication of Mr. Rowan, the District Engineer, stating that if an additional expenditure of \$260,000 were authorized, solid earth embankments could be substituted for trestle-work on Section 15. This expenditure was recommended by the Engineer-in-Chief, and it was submitted by the Minister to Council, but as it was not approved of, no orders were issued by the Department to make the change.

It is stated in the evidence before the Committee, that the substitution of earth embankments for trestle-work was ordered by Mr. Fleming, the Engineer-in-Chief. A letter was written to Mr. Fleming on the subject. In answer, Mr. Fleming reports that he has not ordered the substitution of earth embankments for trestle-work or any extra work whatever on Section 15.

I produce Mr. Fleming's letter.

T. TRUDEAU,  
Deputy Minister of Public Works.