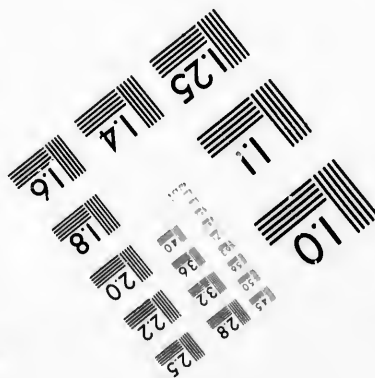
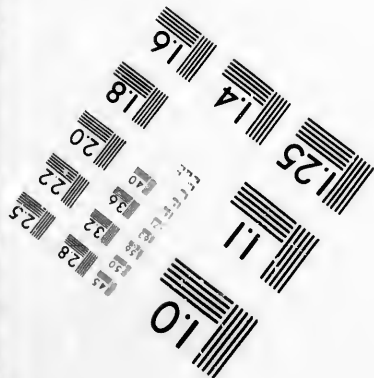
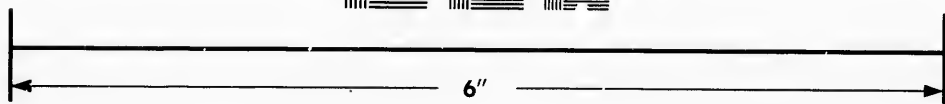
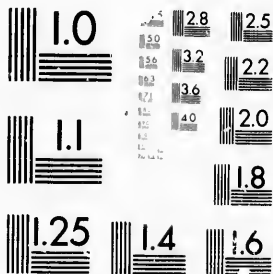


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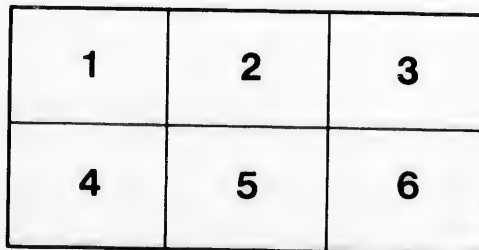
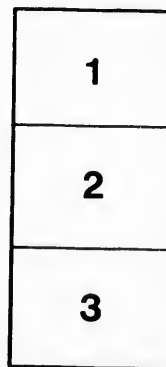
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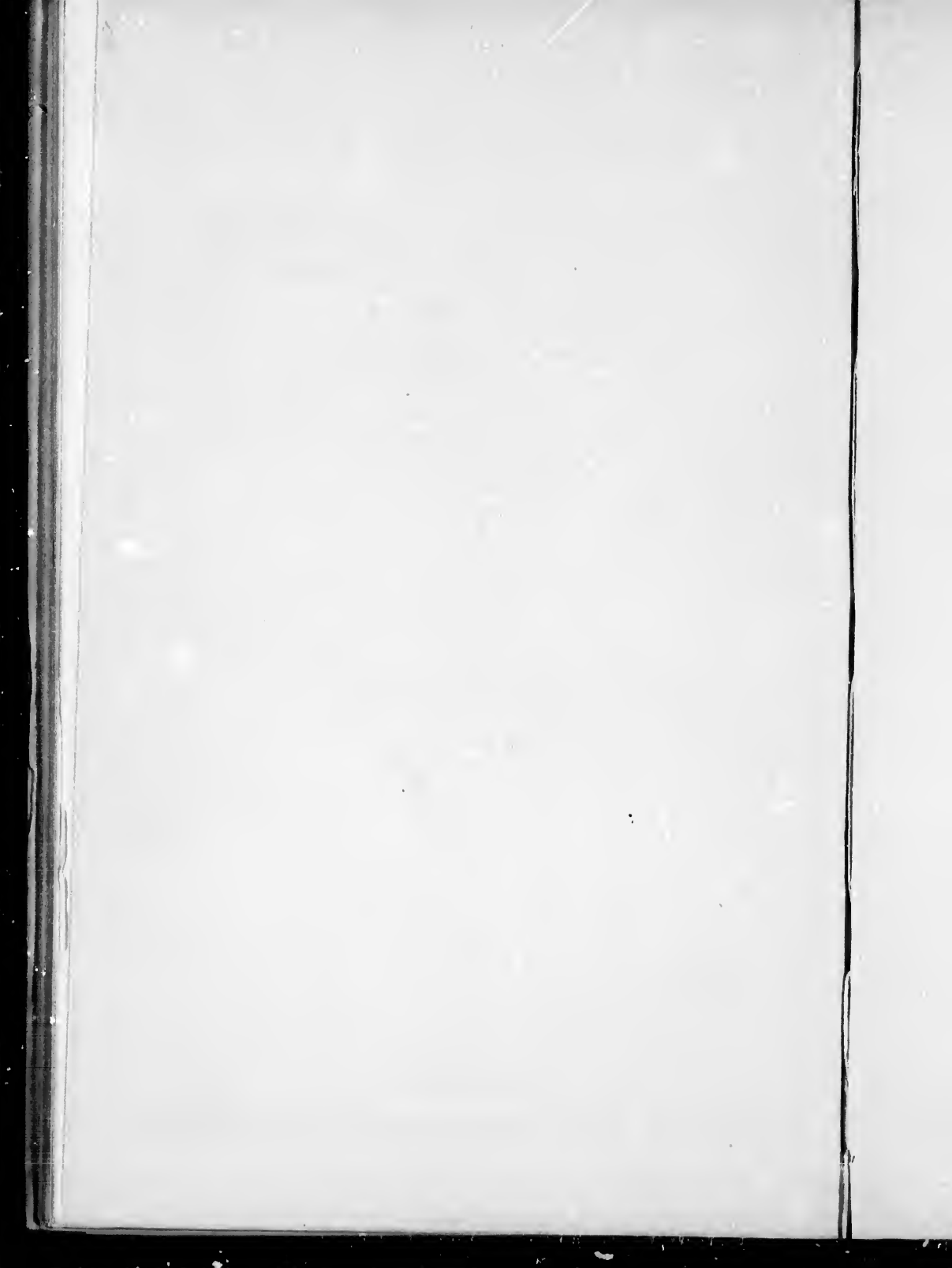
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# INTERCOLONIAL RAILWAY.

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OFFICE OF THE CHIEF ENGINEER,

Ottawa, December 16th, 1869.

*Memorandum*

**For District Engineers and others.**

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I am anxious, now that the working season is closed, that you should, without delay, cause to be prepared for this Office, properly attested copies of all the information referred to in my General Instructions Nos. 1, 2 and 4, specially bearing on those portions of the Line now under Contract in your District.

The information respecting streams is, I think, in your Office; carefully made copies of the books, is what I want. The other information asked for should be prepared and attested by the Engineers on Contracts. I will thank you to request them to do it without delay.

The following is required :

1st. The result of the measurement of streams on each Contract, as per General Instructions No. 1.

2nd. Section Books for each Contract complete in every respect, and attested as per General Instructions No. 2.

3rd. Tables of Bench Marks and Reference Stakes for each Contract, see clause 10, General Instructions No. 2; copies of these Tables should be included in each Section Book transmitted to the Head Office.

4th. A Tracing carefully made of the working profile of each Contract, clause 11 and 12, General Instructions No. 2. This Profile should show in different colours the progress made in cuttings and embankments from month to month.



5th. A copy of the working plan of the Railway as located and now under construction on each Contract. In order to have all the Profiles and Plans of uniform and portable size, I should like them to be on tracing cloth 13 inches broad, (the same as the length of a page of ordinary foolscap,) so that they may be folded one way into book form.

6th. Drawing to a uniform Scale of all structures commenced on each Contract with the following particulars

written thereon, and attested by the Engineer in charge, as well as by his Assistant on the particular sub-division :

1. No. of Contract.
2. No. of Station on Centre Line.
3. Date when Masonry was commenced.
4. Height of Formation level above datum at centre of structure.
5. Height of Line of Paving (in centre) above datum at Centre Line.
6. Height (above datum) of formation at Centre Line and at other points.
7. Inclination of Paving and angle of Skew, if any.
8. Every dimension of structure so far built figured thereon, and every other particular in accordance with clauses 32, 33 and 34, General Instructions No. 4.

To secure uniformity, these drawings of Structure should be carefully made on cloth, foolscap size, (13 x 16) or (in cases of large drawings) afterwards folded to that size. It is particularly desired, that whenever practicable, drawings should be only 13 inches one way, so that they may be bound in book form, foolscap size, when the whole are completed, and as few of them as possible have cross folds.

The enclosed tracing shows a convenient mode of indicating the progress of work done on the Profiles ; when the Excavation or Embankment is not formed full to the proper slopes, the portion executed should be simply coloured—when the southerly slopes (see clause 1 and 2, General Instructions No. 2,) are fully completed, the portion done may be indicated by diagonal red lines, descending from left to right, thus :  and when the Northerly Slope is done, by red lines in the opposite direction, thus : 

It is of some importance to carry out a uniformity of system throughout the whole line, in preparing the Plans and Profiles, as well as in everything else. It appears to me, therefore, that the Earthwork executed during each month, might be shown by the same colours on every Contract Profile ; with that view the following colours are selected ; they form good contrasts, and I shall be glad to see them employed throughout your District.

<i>Blue</i>	for work done in	January and July.
<i>Yellow</i>	do	February and August.
<i>Red</i>	do	March and September.
<i>Green</i>	do	April and October.
<i>Purple</i>	do	May and November.
<i>Orange</i>	do	June and December.

The Drawings and Profiles now asked for, are intended to be a complete exhibit of all the work done in each month up to the end of the year.

In addition to the above, I have to request that you will furnish as soon as possible, detail Schedules (from Cross Sections) of Excavations and Embankments on each Contract within the limits of your District.

These Schedules should be in the form of those printed for the last Tenders called for, and should be as much in detail as may seem necessary. At the same time you will be good enough to prepare and forward Schedules (according to the printed forms) of all structures deemed necessary, but before the final adoption of the latter, I shall probably require some further consultation with you.

The above refers to all Contracts as far as applicable.

I need scarcely add that all the documents asked for should be signed by yourself in attestation of their accuracy. They are intended as Records for this Office.

(Signed,)      SANDFORD FLEMING,  
*Chief Engineer.*



