JOHN ROGER, C.E. & O.L.S.

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TO THE REEVE AND COUNCIL,

OF THE TOWNSHIP OF MORRIS.

GENTLEMEN:-I have the honor to report that in accordance with instructions from your honorable body I have made an examination of the lands and roads within the area described in a certain drainage petition presented to your honorable body by Mr. Coultes and others.

I find: I find that a great portion of the lands within the watershed of the proposed drain(hereafter to be known as the Coultes Drain) is badly in need of a drain of sufficient size and depth to carry off the water and provide a means for underdraining the said lands.

That a drain has been constructed under the Ditches and Watercourses Act under an Award bearing the date of the 22nd day of October A.D. 1904, commencing on the line of lots 6&7 in the  $S_2^1$  of the 5th Con, and ending near the rear of the  $N_2^1$  of lot 3 in the 5th Con, the end of said drain down to the line of lots 4&5 is a covered drain with the exception of 59ft which was covered, but since its construction has been washed away by water, and from the line of said lots 4&5 to the end of the Award Ditch an open drain has been constructed from the lands of the G.T. Railway near the line of lots  $N_2^1$ 2&3, Con. 5, in a northerly direction to near the centre of lot  $S_2^1$ 2 in the 4th Concession.

That said drains are entirely inadequate to carry off the water and injury is sustained thereby by the adjacent lands.

That it is necessary to cross the lands of the Grand Trunk Railway Company in order to drain the lands within the area described in the petition.

I propose:-To begin at the end of the covered portion of the Award Ditch and construct a covered drain consisting of field tile of the size and capacity as shown on the profile hereto annexed, down to stake 19 which is the termination of said Award Ditch, thence to construct an open drain down to the lands of the Grand Trunk Railway and also to deepen, widen. & extend the isting ditch above described to the outlet on lot S22 Concession 4.

The location of the drain, points of commencement and outlet limits of watershed, etc; are clearly shown on the accompanying plan and can be more readily understood from it than by a description in writing.

The watershed on the accompanying plan and the assessment schedule show the approximate number of acres contained in the part affected by the assessment.

I have examined the outlet of the proposed drain and find it sufficient.

Also prepared plans, profiles, specifications and estimates showing the proposed work in detail together with an assessment against the lands and roads comprised in the watershed of the proposed drain.

There are no bridges between highways and private lands nor highway culverts rendered necessary by the proposed work.

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I have: -Also provided for the construction of farm bridges rendered necessary by the work upon each lot or part of lot entitled thereto and allowed in money to the owners of said lot or part of lot the sum shown opposite each lot or part of lot in the assessment schedule hereto annexed under the column headed (Amount to be paid for farm bridges).

The total amount to be paid for such farm bridges is Sixty Dollars (\$60.00)

Also provided for the disposal of the material to be taken from the said work and the said material shall be disposed of as directed in the specifications hereto annexed.

Also made an estimate of all drains incorporated into the proposed work and allowed in money to the owners entitled thereto the value of the drain made use of as shown on the assessment schedule hereto annexed.

The extent and depths of said last mentioned drains are shown on the profile hereto annexed.

Also assessed the lands contiguous to the drain for benefit and I havebase d my assessment for injuring liability and for outlet liability upon the volume(having also regard to the speed)of the water artificially caused to flow upon the injured lands or into the drainage work from the lands and roads so assessed.

Also assessed the lands of the Grand Trunk Railway Company which amount will be refunded providing the Railway Company do the work across their lands as provided by the accompanying plan, profile and specifications.

The proposed drainage work shall be constructed and maintained at the expense of the Municipality of the Township of Morris and the lands and roads therein assessed and in the same relative proportion as shown on the schedule hereto annexed, with the exception that the lots or parts of lots showing to be allowed for the ditch already constructed are not to have any allowance in respect to liability for maintainenance and with the exception that when no money is expended in respect to maintenance on the covered portion of the drain, the benefit assessments on Lots  $S_2^14$  &  $S_2^15$  in the 5th Concession, the benefit assessment on lots  $S_2^14$  in the 5th Concession, the benefit assessment on lots  $S_2^14$  in the 5th Concession.

The owner of each lot or part of lot through which the ditch passes shall keep that portion which is on his or her said lot or part of lot free from obstructions which may hinder or impede the free flow of the water and to remove therefrom all weeds and brushwood and keep the banks of the drain in order as directed by the Council or Inspector in charge.

My estimate of the cost of the work is as follows.

### COULTES DRAIN. MORRIS.

MY ESTIMATE OF THE COST OF T	HE WORK IS AS FOLLOWS.
700' of 12" tile	
1200' of 14" tile	
Protection at the mouth	
Catch Basin at 0x59	
Excavating and laying	44.00
	\$ 715.00
	\$1705.20
	y at 50g 20.00
Farm Bridges	
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	rvey,plans,profiles,etc\$ 140.00 sistance in survey 20.00
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	ppy of Plans etc for G.T.Railway 24.00
	perintendence
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	Total Assessment\$2804.20
	TOOKE STORESHOLD OF CO. C.

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# ASSESSMENT SCHEDULE

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## SPECIFICATIONS.

## SPECIFICATIONS FOR THE CONSTRUCTION OF THE Coulles Aram IN THE TOWNSHIP OF Morris.

The whole work to be done in a most workmanlike manner according to the true intent and meaning of the plan, profile and these specifications prepared for the purpose and under the instruction of the engineer appointed to superintend the construction of the work, whose interpretations of said plans, profiles and specifications shall be final and binding.

The ditch to be dug on the location shown on the plan and indicated by the profile. The ditch to be dug in straight lines from point to point except where angles occur which are to be turned by gentle curves having a radius each of not less than 50 feet.

The depths shown on the profile to be taken from the surface of the ground beside the stake.

The contractor shall preserve the stakes and shall not remove them or change their location.

The depths and bottom widths on the profile are to be strictly adhered to.

The levels and grades are to be determined from the bench marks at the final inspection, said bench marks being for that purpose.

The ditch to be brought to an even grade in the bottom so that water will not stand stagnant therein.

The sides of the finished ditch shall have a uniform slope of one horizontally to one vertically.

All stumps, logs, fallen or standing timber, bush and other obstructions in the course of the drain and along the sides of the drain to be moved a sufficient distance so as not to be covered by any of the excavated material.

The excavated material to be cast equally on both sides of the drain except in cases here-inafter mentioned.

In places where fences interfere with the disposal of the material on one side of the drain, then it shall be cast to the opposite side, or the contractor may remove said fence and rebuild it again, leaving it in as good condition as when found, said rebuilding to be done immediately upon the completion of said portion and said portion shall be completed without delay.

A berm of 3 feet clear shall be left between the spoil bank and the finished ditch.

The spoil bank shall have a slope of not less than I to I on that side next to the ditch.

The spoil bank shall be deposited in such a manner as to do no unnecessary damage to adjacent land or crops.

All ditches or watercourses entering the drain shall be left open their full size.

Openings shall be made in the spoil bank in all places directed by the engineer in charge.

The engineer shall have power to order the contractor to remove back the spoil bank three feet clear as the work progresses. No estimate need be given on any portion of the work where the spoil bank is not so removed.

The engineer shall have power to change the minor details of the work as it progresses.

No extras will be given unless previously agreed upon by the engineer

in charge.

In all places where the ditch runs along a road allowance, and the existing ditch along said road allowance is made use of (which will be shown by the profile) all excavated material in widening, shall be taken from that side further from the road bed, the side next to the road shall be trimmed only, and all excavated material shall be cast to the side further from the road bed unless otherwise specified hereafter.

All culverts shall be made according to plan and where the widths of the same are not specified, they shall be equal in width to the average top width of the

ditch at that locality.

In covered portions, the best quality of field tile obtainable are to be used, of the size and quantity specified on the profile and shall be uniformly and evenly laid, with close fitting joints and covered with dirt to the natural surface of the ground.

In all places where the old channel is abandoned, the excavated material shall be deposited on that side of the ditch next to the abandoned channel unless otherwise directed by the Engineer in charge, and where the haul does not exceed

feet the excavated material shall be deposited in said abandoned channel.

In all places where the ditch runs along a road allowance and the excavated material is used on the road allowance, it shall be uniformly and evenly spread and the road be properly rounded on top. Said spreading and rounding shall be done immediately, as the work progresses.

The contractor shall be responsible for all accidents owing to the nonspreading of the excavated material and shall also be responsible for all accidents, at points where the ditch crosses a road allowance, which are owing to insufficient pro-

tection, or insufficient lighting, or bad workmanship.

Catch basins shall be built as per plan at the following points :- -

At stake 0x59 on line of lots 4&5, Concession  $S_2^{\frac{1}{2}}5$ . The protection at the mouth of the tile shall be built as per plan. The contractor shall give the Engineer at least 10 days notice before Re-staking, an Estimate, or Inspection is wanted.

## ASSESSMENT。SOFFEDULE

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