

**DRAINAGE BLANK.**

IN THE MATTER OF THE PETITION OF

AND OTHERS.

**ENGINEER'S REPORT**

Ditch No. ....

Filed *June 13* 190*7*

*Arthur [unclear]*  
County Auditor.

Approved and adopted .....

.....190.....

.....  
County Auditor.

In the Matter of the Petition of ..... Julius E. Hard, .....

and others

for a ..... Public Ditch ..... in the County of ..... Anoka, .....  
State of Minnesota.

TO THE BOARD OF COUNTY COMMISSIONERS OF ..... Anoka, ..... COUNTY, STATE OF MINNESOTA:

I, the undersigned civil engineer appointed by your order dated the ..... 10th, ..... day  
of ..... December, ..... 1908, to survey the route proposed in the petition of .....  
..... Julius E. Hard ..... and others, for a public

..... I Ditch ..... respectfully report that, within the time specified in your said order,  
I did make a complete survey of the line of said proposed ..... Ditch, ..... from its source  
to its outlet, and of the branches thereof; and did cause stakes to be set along said line, and along the  
branches thereof, numbered progressively down stream at each one hundred feet.

That in making said survey I did locate the source, outlet, and line of said ..... Ditch .....  
as near the points of source, outlet, and line described in said petition therefor as practicable,  
and did consider and specify such branches of said ..... Ditch, ..... as in my opinion are  
necessary to give the land owners likely to be assessed for its construction the full benefit thereof; and  
wherever the line of said ..... Ditch, ..... is along established highways I did locate it at  
a sufficient distance from the center of said highways to admit of good roads along the central line  
thereof, and in such manner as to provide sufficient and suitable culverts and openings to drain  
away the surface water therefrom, and so as not to obstruct the flow of surface water therefrom in time  
of high water; and did, so far as practicable, locate said ..... Ditch and its Branch division lines  
between lands owned by different persons, and did avoid, as far as practicable without sacrificing the  
general utility thereof, laying the line of said Ditch or its branches diagonally across lands  
owned by persons on or across which the said Ditch or its branches must pass.

I have caused a map of said survey to be made, showing the line and location of said  
..... Ditch ..... and of the branches thereof, the highways along which any part thereof  
runs, the stakes placed along the line thereof and along said branches thereof and the number of  
each stake, the separate tracts of land over or across which any part thereof and its branches pass,  
a description of each tract, the number of acres in each tract, the boundaries of each tract, and the  
name of the owner of each tract, .....

.....  
.....  
..... which said map is hereto attached and made a part hereof, marked "Exhibit 1."

I did further cause to be made in tabular form a statement, showing the number of cubic yards to  
be excavated between each of the one hundred feet stakes along the line of said ..... Ditch .....  
and the branches thereof, the cost of excavating the same per cubic yard, the estimated cost of the  
removal of obstructions between each of said one hundred feet stakes, the estimated cost of all wood  
and masonry work, fences or bridges necessary between each of said one hundred feet stakes, the  
estimated cost of all underground work with tile or other material between each of the one hundred  
feet stakes, the total estimated number of cubic yards of earth to be excavated from said .....

..... and the branches thereof, the estimated preliminary expense and expense of  
inspection of the same until its completion, and the total estimated cost of said work complete to its  
completion; which said tabular statement is hereto attached and made a part hereof, marked  
"Exhibit 2."

In locating and designing this Ditch and its branches I have taken into account the number acres to be benefited and that will be assessed for the construction of the same and have made a design that will only relieve the land from the surface water and give an outlet into the creek. This Creek, Clearwater Creek so-called is the natural water channel from Bald Eagle Lake to Peltier Lake and is constantly kept full of water from the over flow of Bald Eagle Lake. To properly drain the land lying along the route as described in the a dredge should be used to widen and deepen the channel and to also straighten it in many places. To do this would require an expenditure of money that would place an assessment on the lands that would be a burden to the owners and would at the same time benefit many acres of land in another County.

I have therefore made a surface drain of the branches and specifically the cleaning of those parts of the Clearwater Creek that are now riffles between a point on the creek where the fall is sufficient to care for the usual flow, and the point on the creek where the branch empties into the creek.

J. E. Hill

Civil Engineer.

Dated this June 8 day of A. D. 1907

State of Minnesota, }  
County of Crow Wing } ss.

J. E. Hill

, being duly sworn, on oath says that

he is the civil engineer who made the foregoing report and made the survey therein referred to; that he has read the foregoing report and the exhibits thereto attached and knows the contents thereof, and that the same are true and correct of his own knowledge.

J. E. Hill

Subscribed and sworn to before me this day of A. D. 1907

I did further cause to be specified and set forth in tabular form the depth of cut, the width at the bottom, the width at the top, between each one hundred feet stakes of said Ditch and its branches the obstructions to be removed, the wood or masonry work, fences, bridges, or other structures, necessary to be constructed between each of said one hundred feet stakes, the underground work, with size and character of tile and other materials necessary to be constructed between each of said one hundred feet stakes, the manner in which the several kinds of work is to be done, and the time within which the work on each of said sections between said one hundred feet stakes is to be done; which said tabular statement is hereto attached and made a part hereof, marked "Exhibit 3."

I did further cause to be specified and set forth in tabular form a statement, showing the time occupied by me in making said survey and my compensation therefor; the names of the assistants and laborers employed in making said survey, the time each was employed, the amount per day of their compensation, and the total amount each is to be paid; and the other expenses of every kind and nature incurred by me in making said survey, and the amounts thereof; which said tabular statement is hereto attached and made a part hereof, marked "Exhibit 4."

Where said Ditch or its branches along or across, or drains, any public or corporate road or railroad, I did specify that the earth shall be deposited on the road in such a manner as to improve the traveled track of the said road.

I did prepare a form of contract and specifications more specifically describing the work and the manner and the time in which the said work shall be completed which form of contract and specifications has been inspected and approved by the county attorney.

I did cause to be prepared, with the assistance of the County Attorney of said Anoka County, a form of contract under which the work of the construction of said Ditch No. 47 is to be done, with complete specifications of the manner in which the work of said construction is to be done attached thereto, which said form of contract and said specifications is hereto attached and made a part hereof, marked "Exhibit 5."