

Engineer Towl Makes Report on River Protection

In order to make it plain to those interested in river protection, we are publishing herewith the report on the river situation here as made by the consulting engineer, Roy N. Towl, of Omaha, to the Wood Bros. Construction Co., of Lincoln, which company has made a business of river protection for a number of years. The report follows:

Omaha, Nebr., Febr. 20, 1922.
Wood Bros. Const. Co.,
Lincoln, Nebraska.
Gentlemen:

For the purpose of making a plan for the apportionment of benefits in the Dakota City River Protection District in Nebraska, I have carefully examined the situation and wish to report as follows:

The map of the District shows approximate shore lines, railroads, town and lands. Deeded land lost by erosion of the Missouri River, amounts to more than 3,000 acres, including about 2,000 town lots. At and below Dakota City, for about two miles, the River has cut back toward the West, almost uniformly, a distance of 1 1/2 miles, leaving the present shore nearly parallel with the Government meander.

The present river channel follows an easy curve past Dakota City, thence through the center chute lying between large sand bars, which nearly close the lower part of this bend.

A wedge shaped sloping sand bar is building out from the Iowa shore above Dakota City just below the point where the channel crosses to the Nebraska shore; this causes severe cutting at and above town, where a great suction eddy is cutting back upstream.

The width of the River in the lower part of the District is about two miles. The channels are divided and obstructed by sand bars.

It is fortunate for this district that the channel is controlled at Sioux City, where it passes under the bridges, and along the Iowa bluffs. I am informed that the shore in the northern mile has not cut or changed for 50 years. This is confirmed by the Government meander.

PLAN OF CONSTRUCTION

Standard revetments will set as bank protection and will make a beach to support the caving banks. They will shape and hold the bend where it crosses to the Nebraska shore. Near the center of Section 3 on the land of Wm. Betcke the cross current should be held away from our shore by building out from the Iowa shore. This will give results similar to Burt County work in Peterson Bend, where the Iowa reef bar was checked by work done above. At and below Dakota City bank protection, similar to that provided at Omaha, will be most effective. Near the center of Section 17, one mile South of town, hard point on the land of Mr. Cobe should be reinforced to hold the cutting current away from shores and direct it through the center chute in the lower part of the bend. This will develop a clear, open, well defined chan-

nel where now there is a badly obstructed, shallow, wide crossing. In fact, this shifting uncertain channel condition is the worst menace to the South half of the District. When these bars consolidate, as they have done opposite Bartlett, Iowa, the whole force of the flood current will lie against and under-cut the Nebraska shore. For this reason, bank protection around this bend should be placed to guard against cross-currents as was done at Bellevue, Neb. The Nebraska channel and cross chute will sand in if the present curve is protected and the current directed through the center chute as here recommended. This will cost far less than protection work required after the hard point south of town is cut out and the cutting head becomes much sharper. This situation is similar to Corning, Missouri, and Barada, Nebraska.

BENEFITS AND COSTS.

The benefits are far greater than the estimated cost. The apportionment of benefits is based upon a system of zones and the classification of lands. The greatest benefit is at the cutting front. From which the zones decrease toward the outer boundaries, for example—take an East and West line of 40 acre tracts through the center of the district, the zone benefits per acre are, \$24.00, \$19.00, \$11.40, \$9.00, \$6.80, \$5.20, \$3.60, \$2.20, \$2.00, \$1.20, \$1.00, 8c and 6c. This shows the total maximum benefits at the river to be \$24.00, on the next 40 acre tract we find \$19.00 and the next \$14.60, etc.

In addition to this report, I have prepared a blueprint map and list of benefits, which I have filed at the office of the County Clerk for inspection of all interested parties.

The total maximum benefits are estimated and fixed at \$160,000.00. The work here outlined and planned will cost less than \$147,000.00 which was the original maximum estimate.

The apportionment on the basis of \$160,000.00 minimum total benefits results as follows: Rail roads, \$54,750.00. Lands, 16,000 acres, \$68,000.00. Dakota City lots and streets, \$31,500.00. County roads, \$5,750.00. The saving in the cost of work will reduce each assessment. In any event, the total assessment is limited to the amount of total benefits found and fixed for each tract.

Respectfully submitted,
ROY N. TOWL,
Consulting Engineer.

HOME DEPARTMENT OF THE FARM BUREAU.

By Geneva Rankin.

The delegates to the dress construction school at Hubbard this week are finding that the time spent is well worth while.

The "open house" day, Friday afternoon at 2:30 should be a day for everybody. The class is being held in the rooms back of Mr. Renze's store. Work accomplished in the class will be on exhibition and other interesting posters, etc., showing dress making problems may be seen.

Miss Gladys Legg, clothing specialist from the State office will lecture on lines and designs suitable for different figures.

Explanations of follow up work to be done in the county will be made at this time.

Those wishing to enroll in the local classes should call the County Home Agent and make arrangements for enrolling.

Free Moving Picture Show on River Bank Protection Work

At the Court House in Dakota City, at 8 p. m., this Thursday evening, March 2nd. A 3-reel moving picture film, showing all the details of the Woods Bros. system of River Bank Protection will be displayed. This film has been exhibited in many parts of the country and attracted especial interest recently before Congress and official Washington. Everyone is invited to attend and see how this protection is installed, and how it has been used at other places.

ITEMS OF INTEREST GLEANED FROM OUR EXCHANGES

Sholes item in Randolph Times: Miss Bernice Burnham returned to South Sioux City Sunday after spending the week-end at home.

Wakefield Republican: Laurence Levernus Barto, the 13-day-old son of Mr. and Mrs. Levi Barto, died this morning (Thursday) of pneumonia. The funeral will be held at the M. E. church on Saturday afternoon, conducted by Rev. R. M. Fagan. Burial will be in the Wakefield cemetery.

Walthill Citizen: Johnny Waite of Homer was here yesterday. Mr. Geo. H. Lamson is not so well this week which his friends will be sorry to learn. Mrs. B. J. Sheldon arrived home from Cuba Tuesday evening. She is staying at the home of her brother, Geo. H. Lamson, until she can get possession of her home.

Winnebago Chief: It seemed like good old times to hear Mrs. Davis sing a solo at the morning service again after her long absence in Homer during the illness of Dr. Nina Smith.

Mrs. Beth went to Sioux City yesterday with her husband whose condition necessitated a course of treatment at the St. Joseph hospital. We regret his absence but hope he may soon be restored to health. Mrs. Beth is bearing her added burdens bravely.

Ponca Journal: Prof. Jacobson was confined to his home a day or two last week.

Mrs. T. J. Mitchell of Sioux City is the guest of her grandmother, Mrs. Twohig, this week.

Mrs. Ralph Baugous, who was a guest of her sister, Mrs. Conrad Jacobson, for several days, left Saturday afternoon for Wayne, where she visited over the week-end with friends before returning to her home near Dakota City.

Pender Times: Hon. Frank O'Gara of Hartington has filed as a candidate for the democratic nomination for congress in this district. He is not only congressional size, but his heart beats with the hearts of the common people everywhere. Miss Lou Hirsch of Dakota City was in Pender Tuesday and Wednesday visiting a few of her many friends. She was formerly deputy county clerk of this county and was a very efficient and capable official. She reports Dr. Nina R. Smith as getting on nicely after her severe illness.

Sioux City Tribune, 28: Mrs. Sarah McTaggart, 50 years old, died at her home in South Sioux City, Neb., early this morning of senility. Mrs. McTaggart had been a resident of South Sioux City all her life.

She is survived by her husband, M. McTaggart, of South Sioux City, and six children, John McTaggart, of Homer, Neb.; Roy McTaggart and Joseph McTaggart, of South Sioux City; Mrs. C. Chamberlain, of Winnebago, Neb.; Martha and Beatrice McTaggart, of South Sioux City.

The funeral services will be held Wednesday at the Catholic church at South Sioux City. Burial will be at Jackson, Neb.

Emerson Enterprise: Mrs. Levi McEntaffer and two children went to Omaha Tuesday morning. Fred Wolf will move from near Nacora on to the quarter section of A. Weinands, three miles northwest of Emerson this week. Max Martin of Nacora was in Emerson on business last Saturday. He is a tenant of the Col. Davis land near Nacora. Guy Linafelter was brought home from Sioux City the latter part of last week. He strained his back when he lifted on a large box. Henry Linafelter brought him down and it was necessary to use a stretcher in getting him home from the depot. Mrs. John Smith of Hubbard was in Emerson the first of the week visiting her sisters, Mesdames N. Feauto, and Wm. Shearer and her brother, M. McEntaffer. Mr. and Mrs. Joe Ryan of Jefferson, So. Dakota, visited here over Sunday at the Tex Demers home. They autoed over and got

along nicely until near Nacora, where they got stuck in the mud. Mr. Demers went to their rescue with a truck, and they enjoyed their visit here. Just the same, R. G. Swanson, who has occupied the E. J. Smith farm southeast of Emerson, has leased the two hundred acres of land from J. M. Bary of Jackson, and will move onto the same this week. This farm is ten miles north of Emerson and joins the farm of John Felter, the big cattle feeder.

The teachers and pupils know that the time for this year's eighth grade examinations will soon be here, and that they have about two and one-half months of hard work ahead of themselves. The conditions are such in most schools that they need all of the help that they can get. Lest that all parents do not realize this, and for fear that some may depend too much upon the apparent capabilities of their children to pass public examinations, I am earnestly suggesting that all parents provide a regular time daily for their children to study at home to supplement their work in school. Especially, am I recommending this in all cases where pupils have attended school not more than in the neighborhood of 160 days in the years that they were in the sixth, seventh, and eighth grades.

Such pupils have missed too many important things that will likely handicap them in examinations. They necessarily have much new information to gather under difficulties, and to refresh their minds on that which they have covered besides in order to have all in hand that may affect their grades. It will take real continuous work and long hours to do this. Nothing should mislead a person to think that this is not necessary. Apparent intelligence or smartness in children and known ability of a teacher to manage a course in a grammar grade should not be accepted as a substitute for the work that is necessary to obtain actual and desired results. Possibilities in children like the resources in soil are good in themselves, but, in either case, they must be worked or formed before they will have produced something that may be appreciated or accepted as having a practical or money value. From my eleven years of experience with eighth grade examinations in this and in other counties, I judge that it takes the hard work of other pupils, and the co-operation and efforts of both parents and teachers, to get a course completed well enough to fit a pupil to be graduated from the eighth grade. It is well that it should not be otherwise, for to substitute an easy and pleasing basis for graduation would make too

many graduates a farce, a graduation a mockery, and a diploma a "scrap of paper". The country is too full of this stuff now. It is time to insist on having graduates only who possess ample merit. Who would have it otherwise?

Parents are you watching the number of times you have kept your boy or girl home from school? Say, don't keep them at home, just take my word for it, you will be sorry in the end and so will they.

We were nicely entertained by the Ladies Literary club at the S. A. Heikes home last week. We had lots of real fun. "Backward, turn backward, Oh Time in your flight; make me a child again just for tonight," seemed to be the motto for everyone present. This club has some real good spellers.

The high school hereby challenges the ladies of the Literary club and their husbands to a spelling contest to be held in the high school some time soon. If the ladies will just appoint a committee to fix the time and terms we will be glad to meet and go over the matter with them.

There is more to be taught in a high school than just books. It is well to turn aside many times and teach the principles of right and living as between man and man. Wholesome lessons in the ethics of the rights of one to the other are really as valuable as Latin or history.

Mr. Carlin is back in school again. We are mighty glad to welcome him. The pupils were good to us while forced to do extra work, and did their full share in helping out in the classes as well as in conduct.

We give the names of those who have been neither tardy nor absent for the month ending February 24, 1922:

Primary Room—Margaret Adair, Willard Surt, Helen Jones, Guy Sides, William Sides, Albert Jones, Charlotte Sides, William Triggs, John Smith.

First Intermediate Room—Dorothy Leamer, Florence Frederick, Walter Sierk, Lester Morris, Fay Messerli, Margaret Giese, George Foltz, Ruth Graham, Blanche Holbrook, Dorothy

Fueston, Louise Lowe, Louisa Neiswanger, Joe Jones.

Second Intermediate—David Warner, Martha Barge, Alfred Forbes, Harry Foltz, Claire Orr, Helen Phillips, Edward Sundt, Gladys Sietz, Frank Forrest, Ethel Foltz, Edgar Frederick, Margaret Sanford, Glenn Waddell.

High School—Anna Berger, Kistie Krumwiede, Joe Betcke, Halleck Mason, Mildred Frederick, Mildred Ream, Leona Smith, Alfred Biermann, Ted Graham, Warren Heikes, Ernest Giese, Ruth Orr, Erwin Bliven, Ralph Bliven, Charles Blacketer, George Berger, Gladys Frederick, Lawrence Frederick, Harry Larson, Morris Niemeyer, Ernest Sierk, Helen Smith.

The following pupils have been neither absent nor tardy for the entire period of six months: Primary—Margaret Adair, Willard Surt, Guy Sides and Charlotte Sides. First Intermediate—Florence Frederick, Dorothy Fueston, George Foltz, Louisa Neiswanger, Second Intermediate—Martha Barge, Edgar Frederick, Gramma Room—Eldo Betcke. High School—Mildred Frederick, Ernest Giese, Ralph Bliven, Charles Blacketer, Maurice Niemeyer, and Helen Smith.

Dakota County School Notes
Wilfred E. Voss, Co. Supt.

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What the Dakota County Farm Bureau Has Done

Helped support both Agricultural and Home Demonstration Agent. Co-operated with State and Federal Extension workers.

Backed up farmers' co-operative marketing associations.

Have over 400 paid up members. Started movement for co-operative milk marketing at Sioux City which has since developed into farmers' milk marketing organization of 350 members with paid secretary.

Pooled \$800 order for arsenate of lead for potato spraying.

Co-ordinated Krehange list for farmers' products and supplies.

Helped grain growers get started into U. S. Grain Growers' Inc.

Maintained active Boys' and Girls' clubs in poultry, sewing, pigs, and held Junior Picnic Achievement Day.

Have active precinct organizations under way with regular meetings and project leaders.

Stands ready to assist all bonifide farmers' organizations.

Ured soil survey of Dakota County by U. S. Bureau of Soils, which survey is now complete.

Brought first, Kanned wheat into county. Increased yield 9 bushels per acre, and 35 cents more per bushel, or total saving on 110 acres of \$1683.70.

Combined on smut control. Successfully tried out Hubam sweet clover and soy beans.

Sixty-five persons attended 8 pruning demonstrations. Five spraying demonstrations held in melon fields and orchards.

Held 12 poultry culling demonstrations, ten lice and mite eradication, as well as incubation and feeding demonstrations.

Organized Dakota County Pure Bred Livestock Breeders' association, which later merged into Northeast Nebraska Purebred Livestock Breeders' Association.

Carried out Pure Bred Sire Campaign.

Vaccinated 132 herds of hogs for cholera, with 9328 head treated and 422455 c. c. serum and virus used.

Estimated saving on vaccination expense and hogs saved through the organization, \$8,557.79.

Co-operated in control of pneumonia, blackleg and tuberculosis.

Kept 37 crop production records.

Business done by Seed and Hog Exchange \$990.50.

Grape Pruning Time is Here

Grape vines may be pruned any time after the wood has ripened in the fall and before the sap starts flowing in the spring. It should not be done, however, when the canes are frozen, because then they are brittle and break easily in handling.

In eastern Nebraska where grapes winter over without danger from freezing when left unprotected, the pruning is done on mild days in February and early March. Wounds made at this time have a chance to dry up before the sap rises. If the cuts are made late in spring or in early summer the sap flows freely from the wounds causing excessive "bleeding."

Whether "bleeding" is injurious to the vines or not is still disputed, but it is safe practice to prune early.

Attention!

Your _____

Hardware Needs

We have them

- Interior Wall Finish
- Outside and Inside Paints and Varnishes
- Burn Paint
- Poultry Fence and Netting
- Carpet Beaters
- Perfection Oil Stoves, and other makes
- Full Line of Enamel and Aluminum Ware
- Full Line of Galvanized Ware
- Horse Collar Pads
- Baskets
- Hog Troughs
- Hog Oilers
- Garden Gates
- Iowa Farm Gates
- Posts—Steel and Wood

Everything in the Hardware and Lumber Line

BEST GRADE OF COAL FOR THE MONEY

SEE US FOR ANYTHING IN BUILDERS HARDWARE LINE

BIG STOCK OF LUMBER

G. F. Hughes & Co.

H. R. GREER, Manager. Dakota City, Neb.

Closing Out Auction Sale!

AT MY HOME PLACE IN JACKSON, NEBRASKA

Saturday, March 4

SALE COMMENCES AT 1 O'CLOCK P. M.

5 Head of Heavy Work Horses

Average weight 1600 lbs. Four Mares and one Gelding. Aged from 5 to 10 years.

5 HEAD OF CATTLE

FOUR MILK Cows—Ayershire breed, ONE ROAN SHORTHORN PUREBRED BULL, coming 2-year-old. Eligible to registration.

7 HEAD OF HOGS

6 BROOD SOWS, ONE HAMPSHIRE MALE HOG, PUREBRED.

FARM MACHINERY, ETC.

3 farm wagons, complete. 1 new broadcast seeder. 1 new 1-horse drill seeder. 1 Deering binder. 1 Deering mowing machine. 1 Champion hay rake. One 16-inch riding plow. One 14-inch walking plow. 1 disc. 2 Century cultivators. 1 hay rack.

2 SETS HEAVY FARM HARNESS.

2 SETS HORSE BLANKETS, ABOUT 70 BUSHELS WHITE RUSSIAN BARLEY, Husless and Seedless, ABOUT 2 DOZEN CHICKENS, ABOUT 20 BALES SO. DAK. HAY.

TERMS—All sums of \$10 and under, Cash; over that amount 10 months time at ten per cent interest.

Tom Sullivan, Owner

Cole, Rasmussen and Minnaugh, Auctioneers,
Jackson State Bank, Clerk.