## Removal of High Shoulders and Opening of Side-Ditches

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A lot of emphasis has been put on drainage at our Road School this year; so some good must be accomplished by having proper drainage for our highways.

I think all of us road superintendents and commissioners realize the importance of having the ditches open and functioning as they should; but with the average county having seven or eight hundred miles of roads, the question is how to get this done. It is not such a big job to take the motor-grader out and ditch a lot of roads, but what are we going to do with the dirt after it is pulled out?

In 1930, the Decatur County commissioners purchased a 60-h.p. caterpillar tractor and a twelve-foot Adams grader and used this outfit for ditching quite a number of miles of roads. The dirt was left on the shoulders, and this is partially responsible for so many high berms along our roads at this time. On a lot of our roads we have shoulders from four to six inches high, thus creating a secondary ditch at the edge of the metaled surface.

In 1943 the county purchased a white front-end loader on a case tractor for loading dirt and also to load stone from stock piles. This loader is still in use and still does good work. However, with a county like ours that has a lot of rolling land with a quick runoff of water, that machine can't possibly handle even the dirt that keeps filling up the ditches in places.

While on a tour of inspection of the roads with the county commissioners in the spring of 1947, I pointed out the need of dirt removal from the shoulders and ditches and asked for a machine for the purpose of loading dirt. The last week in July we decided to get an Athey force-feed loader, and on the 18th day of August the machine was delivered and we began using it.

We have always had a great demand from the farmers and also from the property owners in our towns for the dirt that we haul from the highway; they use it for filling purposes. So I conceived the idea of making a service charge for delivering this dirt to them at a reasonable fee and consulted my commissioners on this idea.

We began on the 18th day of August and loaded and hauled dirt every day we could, until the weather conditions prevented us from ditching. In the time we were able to work at this operation, we delivered over 4,600 loads of dirt at \$1.00 up to \$1.10 per load, price being governed by the length of the haul. We delivered from one to as high as 419 loads to the customer.

We used all the trucks we had available to haul the dirt from the loader, usually from five to eight trucks. We have just 15 regular men; and finances do not permit us to have a regular dirt crew, such as I feel we need during the summer months. So all dirt removed has been done with our regular crew and at such times as other work was not too pressing.

We have 667 miles of roads in our county, including 198 miles of blacktop and 12 miles of concrete. Our plan is to ditch and remove berm on our blacktop roads first; however, we have, the past year, done a few miles of our stone roads. We expect to begin hauling dirt as soon as possible this year and concentrating on that operation. We have enough orders ahead for dirt service to last for a long time. As we begin to work in a community, most of the people want dirt, for as they say, they cannot even load dirt for \$1.00 per truck load.

We first use all the dirt we need to widen fills before any one gets dirt. But when we get from 75 to 150 loads per mile, it is impossible to use all the dirt along our roads for fills.

We contracted for the loader on a rental purchase agreement to pay \$600 per month for four months, or \$2400. Rental was to be applied on purchase of machinery in January, 1948.

All told we worked the machine 32 days and have collected \$4,512 for delivering dirt. We advertised for a used force-feed belt-conveyor dirt loader, contract to be let January 5, 1948. So the machine belongs to us now. We expect to be able to sell enough dirt service in 30 days this year to reimburse the county for the full purchase price of the machine.

Thus the loader will not have cost us anything. Moreover, we cannot begin to estimate the good we are doing our roads by removing high shoulders and opening ditches. We got a lot of favorable comments from the people of our county and also from the people of adjoining communities as they travel the roads we have worked.