

Iowa's crushed rock roads

Using higher quality crushed rock results in less drainage damage, thereby requiring less frequent road maintenance.

THOUGH most rural Iowans believe they or their neighbors live near gravel roads, only 35 percent actually do.

The surfaces of most of Iowa's granular surface roads are crushed limestone or dolomite, not gravel. Though some counties in Iowa use locally available gravel mixes, most of Iowa's roads are surfaced with crushed rock from local quarries.

Choosing suitable crushed rock is vital to ensuring a durable and economical unpaved road. When choosing crushed rock, consider quality and size.

Quality and size

Crushed rock is quality graded based on how it measures up to standards for durability. Tests consist of subjecting the crushed particles to impact, grinding them with steel spheres, and subjecting the material to alternately freezing and thawing conditions. These tests determine how well the crushed rock resists change in gradation from traffic and weather conditions.

As described in Iowa Department of Transportation (Iowa DOT) specifications, Class A crushed rock provides the highest quality, but Class B and even Class D can also be used for surfacing.

Iowa DOT specifications recommend 3/4-inch top size for crushed rock used for surfacing Iowa's roads; however, variation in gradation is allowed. Many counties prefer to use a smaller top size, such as 5/8 inch,

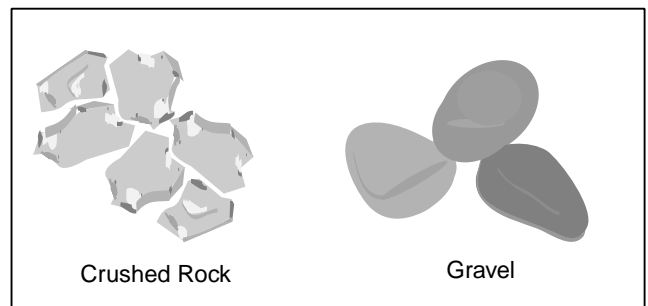
because finer gradations have been found to develop thicker crusts and require less grading. The cost of finer gradation material may be higher than coarser mixes, although the tradeoff is better performance and less maintenance.

With any gradation, controlling the amount of fine particles is important to reduce dust and maintenance.

An ounce of prevention

Using durable and correctly sized crushed rock can help local governments save on road maintenance costs. Using higher quality crushed rock results in less drainage damage, thereby requiring less frequent road maintenance. Specifying quality crushed rock that best meets the local needs and providing timely maintenance will result in acceptable transportation for the many Iowa citizens who live near and travel on crushed rock roads.

For Iowa DOT specifications online go to www.dot.state.ia.us/specifications/index.htm. •



Interested parties must sign up by May 15, 2001.

MOTOR GRADER operators, are you ready to tackle the potholes, ruts, and washboards left from this year's hard winter? If you think your skills could use a little fine-tuning, then you'll want to attend one of this year's Motor Grader Operator (MoGO) workshops.

The Center for Transportation Research and Education (CTRE) is beginning to schedule this year's MoGO workshops. Interested parties must

sign up by May 15, 2001. These workshops are helpful to both beginning motor grader operators and experienced operators who would like some review.

About the MoGO workshop, Kenny Jagerson, a Boone County medium equipment operator, says, "For a newcomer, like myself, it was very informative. It gave me a good overview of the work and techniques involved in motor grading."