## South Dakota Groups Take Part in Prefabricated Highway Development

Through the efforts of the South Dakota Department of Highways and the Bureau of Public Roads, South Dakota State University has developed a prefabricated highway panel.

Emil R. Hargett, associated professor of civil engineering, South Dakota State University, developed a <u>prestressed</u> precast portland cement concrete panel which can be lowered on a roadbed by a crane.

"The idea of prestressed concrete isn't new," Professor Hargett explains, "but prestressed and precast have never before been linked together and used in highway construction."

The precast panels are  $6 \times 24$ feet long and  $4\frac{1}{2}$  inches thick. Each reinforced panel weighs four tons and contains two cubic yards of concrete.

The panels may be shipped from their construction location by truck and put in place with the use of a large crane. Four loops are precast in the panels for easy handling and are removed after the panels are in place.

This type of construction can be used for emergency repairs on highways and spot construction.

Professor Hargett has contacted the South Dakota Department of Highways in an effort to co-ordinate his research with practical application. His plans are to combine the present-day highway construction with a type of offsite precasting, thereby reducing the expense presently involved with prestressed rigid pavement.

He has now divided the program into three phases: (1) investigation; (2) installation of slabs; and (3) field study of performance with cost of a short length composite pavement. The installed sections consist of prestressed and precast concrete banels interconnected and cov-

ļ	State Highway Let	ttings
ļ	Minnesota, St. Paul	Dec. 16
1	rth Dakota Bismarck	Dec. 16
	South Dakota, Pierre	
	Wisconsin, Madison	Dec. 15
Î	wa, Ames	Dec. 6

ered with a  $1\frac{1}{2}$ -inch asphalt mat, and includes a  $24 \times 96$ -foot installation off the present South Dakota highway system. His study also includes 900 feet of roadbed installation on the state highway system which will be let to contract this winter.

A. W. Potter, director of the material and tests division for the Department of Highways, said, "If this type of construction proves successful, it could eliminate some of the maintenance problems we'll be faced with when the interstate system is complete. Small segments of the concrete pavement could be removed to correct subgrade problems and replaced by using this method of prefabrication."

The Bureau of Public Roads has expressed an interest in Professor Hargett's research by sharing part of the cost of the small scale field study. They have also indicated that additional federal funds may be made available for further study.

## Amos Rood, Fargo Equipment Dealer, Well on Road to Recovery after Heart Attack

The many friends of Amos Rood, genial head of General Diesel and Equipment Company of Fargo, will



Amos E. Rood

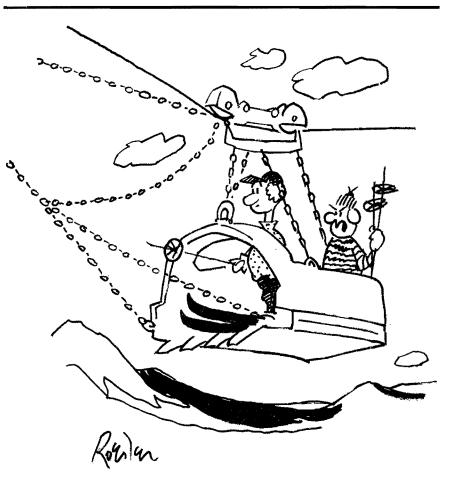
be glad to learn that Amos is well on the road to recovery from the effects of a severe heart attack suffered some time ago.

Amos is one of the old timers in North Dakota equipment circles and has

been one of the most active in affairs of the construction industry, which accounts for the concern of his associates over his physical difficulties.

Construction Bulletin says, "Get back on the job, Amos. The industry needs guys like you to keep it going."

> North Dakota AGC Meets Dec. 4-6, Grand Forks!



<sup>&</sup>quot;Whaddaya mean, ski lift? This is a dragline bucket!"