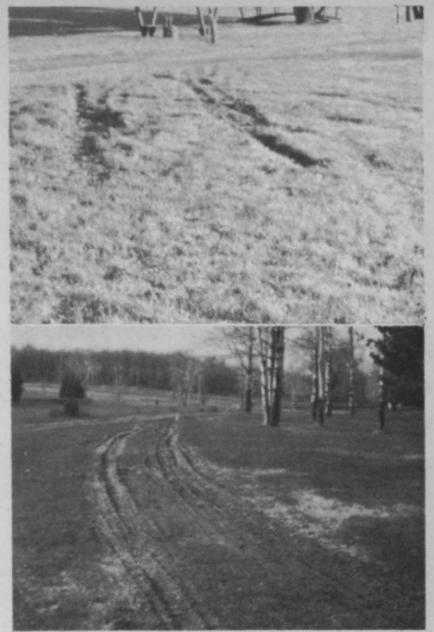




## Super Duals Protect Turf At Memory Gardens

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Author (left) measures the width of the super duals. Even when loaded, truck floats over turf. (Above) Ruts tell the before story.

**M**AINTENANCE of cemetery turfgrass has become an important aspect with the introduction of the new memorial type cemeteries. Judicious landscaping, well-manicured turfgrass and a quite, dignified surroundings lend to the beauty and serenity which bereaved families and friends desire.

Ground maintenance personnel must take every precaution to protect this great asset, yet it still represents a problem, particularly in the north country. Winter, spring and fall heaving, traffic on turf and dirt removal can play havoc with a turfgrass seedbed as well as a turfgrass stand.

Nearly every device imaginable has been contrived to eliminate destruction of turf. Chapels have been erected to minimize the traffic of the diggers, tent equipment, trucks, loads of sand, and vault trucks going into the area.

Large balloon or terre-type tires on all machinery traversing turf are being used to protect and minimize turf damage. At Memory Gardens, we have been concentrating on this feature and to date the results have been fantastic.

We have further found that dirt hauled to and from the gravesite can be placed in a Ford F-350 dump. The approximate one yard dump body, the seven and one-half thousand pound capacity rear axle and the 560 c.i. engine, all work into an unbeatable combination for our purposes. Except for a couple of problems.

The standard 4:10 rear axle gear ratio has proved to be too high in parts of our "rolling terrain," especially with a full load. Add bad weather, snow, ice, mud and hills and it sometimes becomes quite a job getting an unloaded truck to the gravesite.

This problem had been anticipated when the truck was purchased and we installed single 12x16.5 tires (called supersingles) on the rear to replace the original standard duals. This greatly improved traction and floatation. However, it did nothing for the turf. Three clutches and several thousand dollars in damaged turf convinced us that something must be done.

After talking with the driver and mechanic we decided that the truck needed a lower rear axle gear ratio, a posi-traction rear axle and much larger tires.

The rear axle parts were easily installed. But where could we find tires? We thought of aircraft tires, tractor tires and other off-the-road types.

We had previously eliminated turf damage problems with the backhoe by purchasing a 4-wheel drive unit. Thus, when one of the backhoe operators suggested adapting four of the super singles to the rear and two to the front of the truck, we decided to investigate the possibility.

A Goodyear Tire and Rubber Company spokesman notes that the original equipment duals that came on the truck had 40 square inches of tire on the ground at the end of each axle. With a load of 2440 pounds, the downward pressure would be 60 psi. Changing to the 12 x 16.5 super single on each axle would have the effect of increasing the weight distribution over about 65 square inches and reducing the downward pressure to less than 20 psi. Adding dual super singles to each rear axle would double the surface area to about 130 square inches per axle, thereby further spreading the downward weight distribution.

When those tire and rim manufacturers with whom we checked considered dual hubs for 12 x 16.5 a near impossibility, we decided to make them ourselves. It was our luck that the cone shaped centers of the stock dual hubs fit into the 12 x 16.5 rims. With longer lug bolts and a two-inch spacer on the hub between the wheels, we engineered a super truck with fantastic floatation and unbelievable traction.

Goodyear additionally points out that tire pressure for this off-the-road vehicle may be dropped to a recommended 30 pounds for even more floatation.

The net effect of the dual super singles on the rear and super singles on the front of the truck has been a reduced turf maintenance budget, no cracked granite bases, no bent memorials, and no complaints.

Admittedly, the tire acquisition cost has at least doubled. But the increased savings of turf destruction and an almost 70 percent reduction in downward pressure per square inch have more than offset the tire investment in quality turf year-around at Memory Gardens.