SPARTAN STADIUM FIELD CONVERSION UPDATE: WINTER 2001 Lisa M. Lundberg and John N. Rogers, III Department of Crop and Soil Sciences Michigan State University

In December 2000, Michigan State University began the process to convert Spartan Stadium Field from artificial turf to natural grass. Considerable energies went toward the decision as to the field system type. A modular (ITM modules, GreenTech, Richmond, VA) system was determined to be the best fit for the situation. This system is similar to the one developed by MSU scientists for the 1994 World Cup matches at the Pontiac Silverdome. The major benefits of a modular field include rapid drainage and air exchange as well as ease of field replacement and environmental control of the root zone. Worn modules can easily be removed, replaced, and ready to play on in a matter of hours; and heaters can be implemented to keep the root zone warm enough to provide favorable growing conditions late in the playing season. In addition, the modular system allows for remote planting and maturation. What this means is that the modules do not have to be seeded and grown at the playing field site. This benefit is allowing Spartan Stadium to be seeded in May 2000, mature throughout the next year, and be 16 months old before play begins in September 2002.

Construction of Spartan Stadium began in March 2001. Thirty five people and three University farms helped to fill 6,000 modules with gravel and a 90% sand, 10% silt + clay root zone. Of these 6,000 modules, 4,800 were used for the field and the remaining 1,200 will be used for a replacement nursery. This process took approximately one month.

In May 2001, Clark Companies (Delhi, New York) came to MSU to place the modules in the exact configuration of Spartan Stadium, add 4 more inches of root zone, and do a final grade. This took approximately three weeks. On May 25 a 13-25-12 starter fertilizer was applied to the surface. On May 26 the field was seeded with Kentucky bluegrass at a rate of 1.3 lbs/1000ft². The seed was sown with a Brillion seeder and a rotary spreader. The nine varieties of Kentucky bluegrass used were: Champagne, Coventry, Limousine, Midnight, Moonlight, North Star, Rugby II, Serene, and Unique. Through the rest of the spring and summer, the field matured as we controlled weeds, mowed, watered, and fertilized regularly. Beginning late summer and continuing through autumn the field was frequently topdressed to achieve an extra ¹/₂ inch of root zone. In mid-November, a snow mold treatment was applied. With the closing of 2001 and a healthy, mature Spartan field, phase one of the Spartan Stadium conversion was completed.

Phase two began the second week of December with the tearing out of the artificial turf currently in Spartan Stadium. Phase two is expected to last through May of 2002 and involves installing a new floor, underground irrigation, and ducts for heating into Spartan Stadium. The final phase of the conversion will hopefully begin in June of 2002 when the field is moved into Spartan Stadium and the first game is played on August 31, 2002.