

**KEEPING IT SIMPLE:
THE UNIVERSITY OF MICHIGAN SOCCER FIELD
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At the University of Michigan we have a variety of playing fields. They range from fields constructed out of native soil, to fields built to the latest construction standards. All of these fields have some inherent problems that make the management of each different. What we have tried to do with the construction of the Varsity Soccer Field is eliminate these known problems, and construct a playing field which would perform to our standards.

CONSTRUCTION

One of the biggest problems that we addressed before construction was the use of outside contractors. It was decided that The University of Michigan would be the general contractor for this project. This allowed us to do a lot of the work with our own labor force which greatly reduced cost and it also allowed us to maintain the highest level of quality possible.

Construction began November 28, 1994 with the stripping and removal of 10,000 cubic yards of topsoil. An outside contractor was hired for this process. This was done in an effort to lower the finish grade of the field and to use the topsoil for another project within the University. The stripping and removal took approximately 2 weeks to complete.

Once the field was stripped of its topsoil and graded, we began to install the drainage system. We used University labor for this which allowed us to work on the drainage when the weather permitted. The drains were installed in 20' spacing using 4" ADS perforated - smooth interior wall pipe. All of the drains were installed and back-filled with pea-gravel by December 24, 1994. This gave us a dry base to work with the following Spring.

Throughout the winter we worked on the installation of the irrigation system. By March 15, 1995 the irrigation system was installed. The next step in the project was to install the pea-gravel and rootzone mixture. This was delayed until the first week in April due to the frost laws on the roads. During the month of April we spread pea-gravel and mix over the entire playing surface. The field was pitched on a .5% slope to the north. The depth of the pea-gravel was 4" and the depth of the soil mix was 8". The soil mixture consisted of 80% Kent Lake Sand, 10% topsoil, 10% peat. Each layer maintained that .5% slope. We used the sprinkler heads as grade stakes during the spreading of both materials.

Once all the material was installed and placed, we began the fine grading of the field. One step that we skipped during this project was hiring a road grader to come in and grade the field. As we later found out, this step is vital to getting the field as flat as possible. As a result, there are some subtle undulations in the field.

Upon completion of the grading, the field was ready for sodding. Because of the size of the field and the need to get it in play quickly, we decided to use sod laid in rolls. We subcontracted Cygnet Sod Company out of Ohio to do both the harvesting and installation. We used a sod from a local farm due to the quality of the soil it was grown on and to cut down on transportation cost. We began sodding on 5/12/95 and was completed the following day. We laid over 100,000 square feet of sod in 2 days. Three months after the sod was installed, the field was being used for soccer.

CONCLUSIONS

In the short period of time that I have been maintaining athletic field I have learned a number of things. First, money doesn't always buy you a quality product. Over the past 5 years there have been a number of athletic fields built around the country with millions of dollars being spent to construct them. I would say more often than not that those field are being improperly built. The reason is due to the fact that contractors are award a contract to build a field without anyone from the organization questioning how that field will be built. It is important for us as Sports Turf Managers to get involved with the project as soon as possible. This will save time, money and embarrassment later.

Secondly, if you are building a new field, see how much of the work can be done internally. This will not only save money, but it will allow you to have the highest standards possible, your own! Another advantage to this is your employees will take some pride in what they have built. They are definitely going to build it right the first time because they will be the ones fixing problems later.

Finally, it is important not to get all caught up in the latest high tech tools used in fields today, I truly believe that some of the best fields in the country are the ones which are the least complicated. Growing grass is not hard to do. By keeping the design of your field simple, your job of growing grass will be much easier.

COST

Contractor: Strip original topsoil and install pea-gravel and rootzone mixture - \$33,000

Rootzone Mixture: \$21.04/ton *3000 tons -
\$64,000

Pea-Gravel: \$7.97/tons *2000 - \$16,000

Irrigation Materials: Toro 640 sprinklers, supplies and controls - \$7,200

Drainage Materials: ADS pipe and supplies - \$4,000

Sod Cost: 11,500 yards *\$0.70/yard - \$8050

Sod Harvest and Installation : 11,500 yards - \$13,000

TOTAL COST \$145,250