Criteria For a Benchmark Infield

By Jim Hermann, CSFM

While working with a local township, the request was made to develop a criteria or set of standards with which each of the infields within the township could be compared. Infields that didn't meet the criteria would be slated for reconstruction.

So many times we as sports field maintenance personal participate in discussions directed toward maintenance strategy on that perfect infield. An infield with ½ % pitch starting at a point directly behind the pitchers mound and extending in all directions to a perfectly maintained turf perimeter constructed on a gravel blanket, grown in a sand based root zone and most certainly mowed with a gazillion dollar triplex mower. What's wrong with this picture?

I'm sorry but I just can't relate. I have the utmost respect for those involved in the maintenance of such an infield but the truth of the matter is that that's a totally different animal than most of us are involved with.

The purpose of the criteria for a benchmark infield is to provide a reference for all infields. Comparing any infield to these criteria can help maintenance personnel identify potential problem areas. Once identified and corrected, a proactive strategy can be developed to minimize their reoccurrence. This strategy is essential in providing a safe and playable atmosphere for the leagues and teams that utilize these facilities. Based on my experience and to the best of my knowledge, the following represents much of which is desirable in any infield

Every infield should:

1. Maintain positive surface drainage within a range of .75 to 1.5% slope to minimize standing water or erosion.

a. At a distance of 50' a 5" rise in elevation would be an approximate .83% slope. At a distance of 40' a 4" rise in elevation would equate to a .83% slope and so on. This is a good reference.

b. This criterion is field specific. Every reasonable effort should be made to provide positive surface drainage the shortest distance possible to evacuate surface water from the infield to minimize erosion

- Crowning from the middle of an infield to the edges would best serve this purpose

c. Every reasonable effort should be made to prevent funneling of water to minimize erosion

2. Exhibit a smooth transition into adjacent turf areas

a. Lip management is essential in maintaining this objective

3. Be elevated so as not to allow for surface runoff from adjacent turf areas onto the infield skin

a. Multiuse facilities are notorious for this error in construction design

4. Provide a home plate with a 1% or 1" minimum rise in elevation from any point a distance of 9' from that home plate

5. Be constructed with ease of maintenance as a paramount objective

a. Provide an adequate distance between the base paths and adjacent turf perimeter to minimize migration of infield mix into the turf and as such minimize lip buildup.

6. Be constructed with safety as a paramount objective

7. Be constructed with a consideration for the drainage capacity of the sub base and surrounding soils and as such the potential for a high water table to negatively impact on the playability of that infield

a. Where a high water table is identified, a subsurface drainage plan should be considered to evacuate that water and maximize playability

8. Provide reasonable accuracy in mandatory dimensions such as:

a. Baseline and diagonal distances

- The diagonal distance from furthest outside corner of 3rd base to furthest outside corner of 1st base should be 84' 10 ¼" for a 60' base line
- The diagonal distance from furthest outside corner of 3rd base to furthest outside corner of 1st base should be 127' 3 1/3" for a 90' base line

b. Pitching distance

It is interesting to note that the baseline and pitching distances are the

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perform miracles. Often these claims are anecdotal. Ask to see who did the research, when and where. The growth of any plant is limited most by the essential plant nutrient present in the least relative amount (Liebig's "Law of the Minimum").

Should you "fertilize the turf" or fertilize the soil"? In today's economic and environmental climate, turf managers need to verify the philosophy behind the fertilizer recommendations given by the testing laboratories, and then develop an economically feasible and defendable fertility management program.

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only mandatory measurements. All other measurements are "recommended" distances

9. Be graded so as not to allow standing water to accumulate either on the infield or in adjacent turf areas be it fair or foul territory

a. Sand slit drainage should be utilized in turf areas adjacent to skinned areas to eliminate the potential for standing water where existing slope is ineffective

10. Include dugout areas as a criteria for evaluating safety and playability

11. Include backstops and fencing as a criteria for evaluating safety and playability

12. Employ a proactive management plan designed to maintain safety and playability ◆

Field Tip

Certification Practice Test Questions To Go On Line

Do you know the answer to the following question?

Perennial ryegrass plants do not produce:

a) roots
b) stillers
c) stolons
d) shoots

By the end of December, you will be able to "practice" taking the certification exam to help you prepare for the actual exam. Look for the announcement on the home page to access the questions and the answer key. To be eligible to take the test, you must have at a minimum, a high school diploma or equivalent, and achieve a minimum of 40 points earned through a combination of education and experience. To receive a full packet outlining the application process, contact lcraig@sportsturfmanager.com or call 800-323-3875. *(The answer is C = stolons)* ◆