

## APPENDIX A

### Bocce Court U.S Standard Construction Specifications

#### I. Introduction

Bocce, primarily a social game, was introduced into the American sporting vernacular by Italian immigrants over 200 years ago. In standard bocce, the balls must be rolled. There is a variant known as raffa, in which the ball can be lofted toward the targets. A third variation, Volvo, is played like raffa except that the players use balls made of brass, rather than synthetic plastic. As opposed to lawn bowling, which is played on a grass-topped, open-sided field, Bocce is played on a specifically designed and constructed court with static sides and a flat and level, compacted crushed stone surface.

#### II. Dimensions (see drawing #1)

Bocce courts consist of a flat and level playing surface, contained within 6" or taller perimeter curbing. The United States Bocce Federation (USBF) recommends that courts used for international, tournament, or open play should be 13' x 90'. Most recreational courts are somewhat smaller in both length and width than the USBF recommends.

#### III. Base Construction

##### **a. Standard Base Construction (Drawing #2)**

**Sub-base:** The sub-base should be cleared and grubbed of all organic matter. All topsoil should be excavated and removed as well. This area should then be compacted.

**Base Course:** The base course should be constructed of a hard, angular crushed stone base installed over the cleared and compacted sub-base. This layer should be a minimum of 3" in depth after compaction and placed level so that the finished elevations do not vary more than 3/8" in 10' when measured in any direction.

Crushed stone used should meet the following gradation:

#### U.S. Standard

<u>Sieve Size</u>	<u>% Passing</u>
2"	100%
1"	95-100%
3/8"	60-80%
#10	30-40%
#40	15-35%
#200	5-15%

**This material should be watered and compacted to a minimum rate of 90% of its maximum potential compaction.**

**Leveling Course:** The leveling course should be constructed of a hard, angular crushed stone screening installed directly on top of the base course. This stone screening layer should be a minimum of 1" thick after compaction and be placed level so that the finished elevations do not vary more than ¼" in 10' when measured in any direction. A Geotextile weed barrier should be installed to prevent the growth of weed between the base course and surfacing.

Crushed stone should meet the following gradation:

This material should be watered and compacted to a minimum rate of 90% of its maximum potential compaction.

#### **IV. Surfacing**

The surfacing course should be constructed of 1" to 2" of a crushed metabasalt, igneous rock, blended with a gypsum binder to form a homogeneous mixture. The material should have a maximum density of more than 135 lbs. per cubic ft when tested by standard proctor. This material should be Har-Tru as manufactured by Lee Tennis, Charlottesville, VA.

The particle sizes of this product should meet the following gradation:

<b>U.S. Standard</b>	
<b>Sieve Size</b>	<b>% Passing</b>
#16	0-5%
#20	12-25%
#30	12-25%
#70	25-40%
#100	2-9%
PAN	23-33%

The Har-Tru surfacing should be placed by way so that the finished surface elevations will not vary more than 1/8" in 10' when measured in any direction. The surface should be laid flat and level. Then it should be thoroughly watered to its full depth and compacted with a 400 to 1200 lb. roller until desired firmness is achieved.

#### **V. Perimeter Curbing**

The perimeter of the court is surrounded by a non-moveable, permanent curbing. The finish elevation of the top of the curbing should be at least 6" above the finished playing surface. This curbing can be

constructed from concrete must be anchored to the ground so that no movement takes place when struck with a thrown, rolled bocce ball.

When using a formed in-place concrete curb, a bumper board must be installed as well.

This bumper board can be constructed from weather resistant wooden, plastic, or hard rubber material. In all cases, the fasteners used to attach the bumper boards to the curbing must be recessed to the point where they will not contact any thrown bocce balls. Concrete walls that are left exposed and void of bumpers will scar and damage the balls during play and are not acceptable.

Foul lines (10' from each end) should be painted or permanently marked on the inside of the perimeter curbing.

## **VI. Drainage**

In an effort to eliminate excessive storm water from the court, drill or form in place a series of "weep holes". These holes should be placed  $\frac{1}{8}$ " to  $\frac{1}{4}$ " above the finished playing surface and should be 1" in diameter.

Weep holes should be placed every 6' to 10' around the entire perimeter curbing system. If the surrounding landscaping is finished to an elevation above the weep holes, consideration should be made outside of the court to remove this excess water. The holes may be tied together by PVC piping and drained to an appropriate location or a "French drain" installed around the outer perimeter. A small dry well may be dug as a reservoir for removal of this storm water.