# WESTMOUNT'S PLAYING FIELDS: DEVELOPING AN ALL 'NATURAL TURF' STRATEGY

Bruce St. Louis Director General September 2007



#### **SECTION 1: INTRODUCTION & OBJECTIVES**

As the 'next step' in assessing the options to provide quality playing fields for our soccer players (and other users) of the playing fields in Westmount Park, Council instructed administration to carry out a more detailed analysis of the 'natural turf' option. This analysis had to take into account the following criteria and priorities:

- the number and allocation of the fields must be able to support city programs and activities at 2007 participation levels
- priority will be given to city programs over other field users (such as schools, general use and private rentals)
- schools will be given 'second level' priority access to the playing fields
- the main playing field in Westmount Park shall be considered as 'accessible' as a playing field for the purpose of this analysis
- the following maximum field usage criteria will be applied:

HEAVY USE 20 hrs/week MEDIUM USE 23 hrs/week LIGHT USE 25 hrs/week

 adequate controls will be put into place to prevent future overuse of the playing fields (using the above-mentioned maximum use criteria). This objective will be discussed in greater detail in the 'CONCLUSIONS' section of this report.

The process used to carry out the detailed analysis was based primarily on the principles of 'supply and demand'. 'Demand' for playing field time emanating from many different sources has increased significantly over the past decade whereas 'supply', i.e. the number and availability of local playing fields, has remained static. Administration's primary objective and challenge was to develop a 'natural turf' solution that could accommodate the demand but will not result in the premature degradation of the playing fields that is being experienced today.

# SECTION 2: THE DEMANDS ON CITY PLAYING FIELDS

A lot of attention has been given to the significant increase in the city's soccer program over the past 8 years (510 players registered in 1999, 1106 in 2007). From April through June of each year, the soccer program is the predominant activity on our playing fields, but there are several others also vying for playing field time as well, which include:

- baseball
- softball
- rugby
- lacrosse
- school programs

The 2007 allocation schedule for the city's playing fields confirms that they are all at (or exceed) the recommended maximum of 25 hours of 'programmed' use per week.

Usage statistics, by playing field, are as follows:

TABLE 1
CURRENT PLAYING FIELD USAGE

FIELD	CITY-USE HRS/WEEK	OTHER USE * HRS/WEEK	TOTAL
1) Westmount Park – Lower Field (east)	16.0	15.0	31.0
2) Westmount Park – Lower Field (west)	19.0	15.0	34.0
3) Westmount Park – Main Field	21.0	18.5	39.5
4) W.A.G.	20.5	32.5	53.0
5) King George Park	16.5	22.0	38.5

<sup>\*</sup> The 'other use' data shown represents the hours on the schedule that are set aside for the schools. Actual use can vary significantly from one week to the next.

Clearly, the usage of the fields is an issue that will have to be looked at in much greater detail if the city moves forward with the installation of new natural turf fields in Westmount Park. Current city programming is well within the range of 'acceptable use', but 'other use', if not carefully planned and monitored, will cause excessive wear-and-tear that could result in irreparable damage to the fields, especially if excessive use occurs in early spring.

The scheduling of city programs, particularly soccer, is also a major issue that must be reviewed. Traditionally, the soccer program gets under way in early spring (by the second or third week in April if possible). This early start is required so the soccer season can be completed by the June 24<sup>th</sup> long week-end. Yet the early start can cause substantial damage to the fields, especially in Westmount Park where most of the soccer activity is scheduled. To give you an idea of the size of the soccer program currently using these fields, the following table provides a breakdown of the 2007 level of participation and number of teams:

TABLE 2
WESTMOUNT SOCCER 2007

LEVEL	AGE	NO. OF PLAYERS	NO. OF TEAMS	GAMES PER SEASON PER TEAM
Intro	5	84	6	6
Termite	6 & 7	218	18	12
Novice	8 & 9	218	14	12
Atom	10 & 11	218	14	12
Pee Wee	12 & 13	150	10	12
Bantam	14 – 17	124	8	12
Juvenile	18 +	68	4	12
		1,106 *	74	

<sup>\*</sup> In addition to the number that actually played, there were over 100 on 'waiting lists' that were never assigned to a team.

While it is not expected that the soccer program will continue to grow at the same rate in the years to come, all indications are that participation will remain relatively stable or experience modest growth. As such, the current size and distribution of age group levels should be used for medium and long-term facilities planning.

#### **SECTION 3: DEVELOPING THE BEST 'NATURAL TURF' OPTION**

There are 3 key issues that must be addressed before the city can move ahead with implementing a natural turf playing field option, these being:

- carrying out detailed research and analysis of the best possible grass mix and supporting infrastructure (drainage and irrigation systems, composition of supporting soil, etc.) that would be best suited for both our needs and climate;
- 2) developing improved maintenance and field management policies (that would be well documented) which, when implemented, will ensure both a consistent, high-quality playing surface and its longevity; and
- 3) controlling use to assure it does not exceed the appropriate level to prevent premature deterioration of the playing surface.

Regarding the first point, administration strongly suggests that an experienced consultant be engaged to carry out the research and testing required to develop a final recommendation as to what the natural surface (and its supporting infrastructure) would best suit the city's needs. Upon receipt and acceptance of this report, work could then begin on preparing preliminary detailed plans, specifications and cost estimates. Regarding the issue of cost, this could vary significantly from one option to the next, so we must consider that the current natural turf budget estimate of \$661,000 is a 'soft' number at this point.

As for point 2, developing an improved maintenance and field management policy manual will be essential. It will define not only what maintenance procedures must be followed throughout the year, it will also establish guidelines as to when the fields can and, more importantly, cannot be used. This will result in the varying start-up dates of sports programs from one year to the next, but this is the only way to prevent the early season damage that we are experiencing each year.

Point 3 involves assessing strategies to protect the fields, especially those that will be subjected to MEDIUM and HEAVY use, so such usage can be properly controlled (especially after inclement weather) to allow the fields to recover. Fencing will be a primary consideration.

The initial policy manual would deal with the Westmount Park playing fields (since this is where the major work will be carried out) but the manual would have to be expanded to eventually include all other playing fields as well. The manual would be adapted to take into account the varying use and types of activities that occur on each field. The field possibilities that have been looked at thus far really do vary in size, condition and use from one to the next.

One last point; to develop the best natural turf option, special attention must be paid to the lower playing fields in Westmount Park. If we truly want to create and maintain high quality natural turf playing fields, it is administration's opinion that a separate solution must be found for the students of Westmount Park School. Experience has shown that a natural turf surface on the lower playing fields cannot sustain the traffic of both city and school programs. An area separate from the playing fields should be created for the school to use; outside of school hours, the area would also be available for general use by citizens. Our recommendation on this issue is presented in Section 5 of this report.

## SECTION 4: PLAYING FIELD OPTIONS STUDIED

In the course of preparing this report, administration analyzed 15 sites (both municipal and private) that are large enough to be used as a playing field facility (or could possibly be developed into one) for soccer and/or other sports and recreation programs. Many of these are used extensively by the populations they serve and therefore could not be adapted to our needs. The fields and/or areas studied included Westmount Park main field and the two lower fields, King George Park, Westmount Athletic Grounds, Prince Albert Park, Queen Elizabeth Gardens, Stayner Park, City Hall grounds, the grounds of six local schools and the MUHC property). With specific regard to our soccer program, there are 3 sizes of pitches that are required (to accommodate the ages and skills of the players). These are:

TABLE 3 SOCCER FIELD REQUIREMENTS					
LEVEL	AGE	FIELD TYPE	DIMENSIONS		
INTRO	5	MINI	50м x 30м		
TERMITE	6 & 7	MINI	50M X 30M		
Novice	8 & 9	JUNIOR	60m x 40m		
Атом	10 & 11	JUNIOR	60m x 40m		
PEE WEE	12 & 13	SENIOR	100м х 60м		
BANTAM	14 – 17	SENIOR	100м х 60м		
JUVENILE	18 +	SENIOR	100м х 60м		

There can be minimal variances to these dimensions (for house league soccer at least) but each site studied had to at least accommodate a 'mini' field. It should be noted that, in addition to the actual dimensions of the playing surface, a 5 meter 'buffer zone' is required around the full perimeter of the field for the safety of the players.

### **SECTION 5: CONCLUSIONS AND RECOMMENDATIONS**

If Council ultimately decides to proceed with a natural turf solution for Westmount Park, a fairly detailed 're-think' of current field management policies and practices will be required. Issues such as use (when, by who, how much), fencing, enforcement and the very nature of the types of fields themselves will have to be addressed. As such, administration respectfully submits the following recommendations for Council's consideration (all recommendations were developed to support a natural turf solution only).

- The lower playing field area should be developed to create 1 'senior' and 1 'junior' playing fields. These fields should be enclosed with the appropriate fencing.
- 2) A separate area (unfenced) would be developed at the east end of the playing field area for both general use and by Westmount Park School. A separate recommendation as to the natural surface material to be used (i.e. grass or other type of ground cover) will be developed that will best suit the projected use of this area.
- The main field in Westmount Park would be used for 'mini field' play only (4 are possible). The permanent goal posts should be removed. A landscaping scheme to prevent the field to be used for non-sanctioned adult soccer games must be developed (.e.g. flower beds at key locations that would better define the layout of the mini fields but would obstruct a 'full field' game).
- 4) Engage a recognized specialist in playing field planning to prepare a detailed report as to the best playing surface option(s) for the lower playing fields in Westmount Park. This report will be essential since detailed plans and specifications cannot be prepared until this initial report is completed and approved by Council.
- 5) From the information presented in Section 4, it is recommended that a playing field 'management and maintenance policy manual' be developed for the following playing fields:
- Westmount Park (main field)
- Westmount Park (lower field)
- Westmount Athletic Grounds
- King George Park
- At this point in time, it is not recommended to proceed with an analysis of any of the other 11 potential sites that were studied for creating possible new playing fields. Each of these sites has its own dedicated use or would require major infrastructure changes at considerable costs. While there is some potential for such development, this should only be considered after the playing field management and maintenance guide for the existing playing fields is developed and implemented (and its impact measured).
- 7) Opportunities for off-street parking in the vicinity of Westmount Park and W.A.G. playing fields should be explored. The other traffic issues raised by local residents will require further study by the city's Traffic Committee.

- A survey of soccer parents should be carried out to solicit their opinions as to starting dates, duration and format of the soccer program, summer play and related issues. (For example, by compressing the 12 game schedule into such a short May-June time frame, there is no time or availability of fields for practice sessions, which is important at all levels of play).
- 9) A detailed supervision (and enforcement) plan for the natural turf playing fields must be developed to prevent overuse or damaging activities on them. The budget implications of this plan will also have to be developed for Council's consideration.
- 10) It is recommended that allocation of available playing field time slots should be prioritized as follows:
  - city programs and activities
  - general use
  - school programs
  - other rentals

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