Developing a facilities strategy
Welcome from your Educator

Alastair Cox
(aka The Turf Guru)

FIH Facilities and Quality Programme Manager
FIH Academy Developer
Meet & greet

Via the TEAMS chat function tell us:

• Who are you?
• Where are you from?
• What do you do in hockey?
• One expectation you have of this course
• One concern you have for this course
About this Workshop

By the end of the workshop we hope you will:

• Understand the basics of developing a facilities strategy
• Understand the different field & surfacing options
• Understand many of the other features a new hockey facility needs to consider

Consider it good use of the next 3 hours
Let’s start by establishing where we are today

Who currently has a facilities strategy for hockey in their region?
The basic principles

But without a suitable place to play - there is no hockey

Ensuring you have enough and right type of facility to allow hockey to grow is fundamental to success

Hockey is:

- Socially inclusive
- Gender equal
- Fun
- Fan-centric
- Growing
Why do you need a facilities strategy?
Why do you need a facilities strategy?

• Sport facilities are expensive
• Investment is often difficult to obtain
• Investors want certainty of benefits
• Allows you to tailor your facilities investment to where it is most needed / offers greatest benefit
• Allows you to monitor success – key to future investment.
A facilities strategy aims to provide a framework for developing facilities which are appropriately scaled and located to meet the needs of users locally, regionally, nationally and internationally.
Developing a hockey facilities strategy – the 6 step approach

1. Prepare the approach
2. Gather supply & demand information
3. Develop the current and feature pictures of provision
4. Write and adopt the strategy
5. Apply & deliver the strategy
6. Keep the strategy up to date
The basics of a facilities strategy

1. To set direction and priorities
2. To get everyone on the same page
3. To simplify decision-making
4. To drive alignment
5. To communicate the message

Remember - developing strategy takes time and resources. It requires the time and commitment of some of the most highly paid and highly experienced people in your organization. So, if your team isn’t willing to invest what is needed, don’t do it. Poor planning is often worse than no planning at all.
Prepare and tailor the approach

- Provide clarity over why the strategy is being developed and what it seeks to achieve
- Ensure a strong and representative steering group is put in place to lead the work
- Provide clarity on how the development of the strategy is to be managed
- Provide certainty on the support and resource available to help develop a strategy
- Develop a strong and tailored brief to guide the development of the strategy
- Develop an understanding how the required information set out in can be gathered
Gather information and views on the supply of and demand for fields

- How many people play hockey in your State/region/city?
  - Where are they located?
  - What is the gender split
  - How old are they?
  - Which social economic group are they in?

- Which formats of the game are played?
  - 11 a-side
  - Hockey5s
  - Indoor hockey
  - Introductory formats
  - Masters hockey

- How many hockey fields are there?
  - What is the playing surface?
  - Are they suitable for international hockey?
  - Who owns them?
  - Are they used just for hockey
  - How old are they?
  - Do they have lighting?
Assess the supply and demand information

Working through this stage will help to provide:

• An understanding of the situation at all sites

• An indication of whether the current supply in the study area is adequate to meet both current and future demand

• The views and opinions of all relevant parties on the adequacy of provision

• The key issues with the supply of and demand for provision in the study area
It is likely that your strategy will identify a need for better / additional facilities – so what does this mean?
<table>
<thead>
<tr>
<th>Pathway step</th>
<th>Objective</th>
<th>Criteria</th>
<th>Type of facility</th>
<th>Type of playing surface</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation</td>
<td>Introduction to hockey – creating interest</td>
<td>Cost effective access to welcoming &amp; attractive facilities</td>
<td>Multi-sport</td>
<td>Gravel, Concrete, Natural grass, 3G, 4G, Sand filled, Sand dressed</td>
</tr>
<tr>
<td>Participation</td>
<td>Opportunities to play</td>
<td></td>
<td>Hockey5s, 11 a-side</td>
<td></td>
</tr>
<tr>
<td>Performance</td>
<td>Training and competitive play</td>
<td>Regular access to high quality fields</td>
<td>Hockey5s</td>
<td>Sand dressed synthetic turf</td>
</tr>
<tr>
<td>High Performance</td>
<td></td>
<td>Coaching, fitness and medical infrastructure</td>
<td>11 a-side</td>
<td>Non-filled Wet Turf or Sand dressed synthetic turf</td>
</tr>
<tr>
<td>Elite</td>
<td>High performance play</td>
<td>National training centres</td>
<td>Hockey5s</td>
<td>Sand dressed, Non-filled Wet Turf</td>
</tr>
<tr>
<td></td>
<td>International competition</td>
<td>International standard venues</td>
<td>11 a-side</td>
<td>Non-filled Wet Turf</td>
</tr>
</tbody>
</table>
Best places to locate hockey facilities

- **FOUNDATION**
  - Typically within 20 minutes of home
  - Typically located at schools or municipal leisure centres

- **Participation**
  - Typically within 30 minutes of home
  - Typically located at local clubs, schools or municipal venues

- **Performance**
  - Typically within 1 hour of home
  - Typically located in Universities or specialist academy

- **Elite / stadium**
  - Typically within 3 hours of home
  - Typically located in regional/state capital cities
# Supporting infra-structure

<table>
<thead>
<tr>
<th>Supporting infra-structure</th>
<th>Foundation</th>
<th>Participation</th>
<th>Performance</th>
<th>Elite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main pitch / court</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Floodlighting</td>
<td>Desirable</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Changing accommodation / showers / toilets</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Booking / venue control</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Maintenance equipment / store</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>On-site catering</td>
<td>Desirable</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Spectator viewing</td>
<td>Desirable</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Secondary pitch / training areas</td>
<td></td>
<td>✓</td>
<td>Desirable</td>
<td></td>
</tr>
<tr>
<td>Fitness &amp; conditioning gym</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Medical and rehab facilities</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Tournament office space</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Media facilities</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Lecture rooms</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>On-site accommodation</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
Typical pitch construction

Over 60% of the cost of hockey field is below & around the playing surface.
And it is not just the field you need to consider

- Maintenance equipment
- Drainage

Team shelters
Irrigation system – tanks, pumps and rain guns
Changing & social facilities
Floodlighting
Goals
Perimeter fencing
Car parking / transportation
So what type of facility?

11 x 11
Min. 5747 m²
Rec. 6185 m²

Hockey5s
(Tournament courts)
1536 m²

Hockey5s
(Participation courts)
Min. 800 m²
What about a multi-sport field?

Funding a new sports field is very expensive, irrespective of the surface type.

A multi-sport field will:

• Allow a greater range of uses; justifying public investment

• Maximise the use of land, often an issue in large conurbations

• Generate more income to help sustain a venue’s viability

• Help build social inclusion & breakdown barriers
What type of multi-sport field?

GEN 2 – an initiative between hockey, tennis and netball

- Uses hockey friendly surfaces (sand dressed)
- Suitable for tennis, netball, lacrosse, futsal, etc

One Turf – an initiative between football, rugby and hockey

- Uses long pile surfaces
- Suitable for soccer, American football, rugby, hockey, lacrosse, etc

www.fih.ch/facilities
Hockey5s on full size sports fields
Stand-alone Hockey5s courts

Multi-sport partnerships:
- Futsal
- Tennis
- Netball
- Cricket
A court in a box – just add ground works
What type of playing surface is suitable for each pathway step?
3G long pile rubber filled turf

- Long pile open piled synthetic turf with rubber and sand infill, designed to play like natural grass
- Hockey ball sits into carpet pile = slow pace
- Infill can cause ball to bobble as it rolls – making ball control difficult
- Potential for stick to get under ball causing it to lift unexpectedly

<table>
<thead>
<tr>
<th>Hockey playing qualities</th>
<th>Poor</th>
<th>Acceptable</th>
<th>Excellent</th>
</tr>
</thead>
</table>

Hockey playing qualities are acceptable.
4G long pile turf

- Semi-open synthetic turf either with no infill or sand dressing. Designed to replace 3G turf in markets concerned about use of polymeric infills

- Hockey ball sits into carpet pile = slow pace

- Potential for stick to get under ball causing it to lift unexpectedly

<table>
<thead>
<tr>
<th>Hockey playing qualities</th>
<th>Poor</th>
<th>Acceptable</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Sand filled turf

- Original multi-sport surface, used extensively for hockey in 1990s – 2000s
- Open pile carpet filled to surface with sand
- Sand infill makes surface abrasive
- Infill will cause ball to bobble when rolling on surface
- Infill makes surface firm, jarring when struck by stick

<table>
<thead>
<tr>
<th>Hockey playing qualities</th>
<th>Poor</th>
<th>Acceptable</th>
<th>Excellent</th>
</tr>
</thead>
</table>

![Image of sand filled turf]
Sand dressed hockey turf

- Designed primarily for hockey
- Short dense piled synthetic turf carpet, with a sand dressing not visible on the surface
- Can be played on dry or wet – when wet almost as good as a non-filled wet turf

<table>
<thead>
<tr>
<th>Hockey playing qualities</th>
<th>Poor</th>
<th>Acceptable</th>
<th>Excellent</th>
</tr>
</thead>
</table>


Non filled (wet) hockey turf

- Designed for elite level hockey
- Short dense pile synthetic turf carpet. No infill
- Designed to be used with water

Hockey playing qualities

<table>
<thead>
<tr>
<th>Poor</th>
<th>Acceptable</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Hockey playing qualities scale from Poor to Excellent)
What about DRY TURF?

In 2018 FIH announced its intention to move away from playing elite level hockey on wet Hockey Turf. It has challenged the industry to develop surfaces that play like wet turf, but without watering.

Today, our partners in the Hockey Turf industry are investigating to see if they can achieve our objective.

If they cannot, will hockey be willing to accept a different style of play?

Whatever happens the FIH will not ban the use of existing wet fields, so people can invest with confidence.
Until Dry Turf – consider sub-field irrigation

- Allows recycling of water
- Less consumption – no loss through wind drift
- Constant and even distribution of water across field and throughout a game
FIH Certified Field Builders are companies that specialise in building hockey fields.

- The companies have a proven ability to construct fields to the standards the game requires.
- They have appropriate in-house civil engineering expertise for the design and construction of 11-a-side and Hockey 5s fields.
- They operate quality management systems to ensure consistency in their work.
A hockey turf field is a complicated piece of engineering that is designed to have the sports characteristics required for the games to be played on it; provide a safe playing environment for the players using it; withstand the wear and tear of normal use and the various climatic conditions it will be subjected to.

Not surprisingly such a demanding set of requirements means the playing surface needs maintaining; whilst a synthetic turf surface will sustain much greater levels of use than a natural turf field they are NOT MAINTENANCE FREE and it is very important that the surface is maintained correctly from the first day it is used and therein after throughout its life.
• No surface is maintenance free
• Poorly maintained surfaces will not perform as players expect – it will inhibit their development
• Failure to maintain will invalidate the manufacturer’s warranty
• Poorly maintained surfaces are a cause of accidents. Increasingly, injured players are seeking compensation
Typical examples of unacceptable maintenance
Maintenance procedures should be designed to ensure the:

- Playing surface provides a **SAFE** environment
- Playing surface retains **GOOD** playing characteristics
- Surface drainage is maintained throughout the life of the field
- Field **looks welcoming** and well cared for
- The **life of the surface is maximised**
Typical maintenance regium

On a daily basis, remove food, general litter and any bodily fluids (blood, etc.) using a suitable disinfectant. Remove any surface stains (from drinks, or maintenance equipment, etc).

On a weekly basis, make a visual examination of the surface for seam or line markings failures. Repair any failures immediately. On sand dressed or filled/multi-sport surfaces, top up infill levels on penalty corner spots and other high use areas.

At least weekly, brush the surface to groom the carpet pile and redistribute any displaced infill remove detritus. Remove dirt, dust and leaf litter - do not let it sit on the surface.

On at least a monthly basis, keep a close watch for algae invasion on unfilled and sand dressed pitches, especially in warmer climates - take early action on algae, moss, weeds, etc.

At least yearly, deep clean with high pressure cleaners to remove contaminants and algae.
Sinking fund

A sinking fund should be established as soon as the new field is brought into use to ensure that sufficient funds are available to replace the surface when it reaches the end of its life.

As the cost of replacement is in the future, it will be necessary to save the amount of money required at that future date, not today’s cost.
In conclusion

• The success of the strategy should be determined by how it is used.

• In order for it to be used well it needs to be of benefit to a variety of people in a variety of circumstances. This will help to ensure the delivery of the recommendations and actions.

• Developing a Strategy will have required significant resources from a range of parties. It is therefore essential that the benefits of providing these resources are not lost by leaving the Strategy on the shelf and letting it run out of date.

• Along with ensuring it is used and applied a process should be put in place to keep the Strategy robust and up to date.
Thanks for your participation

facilities@fih.ch

www.fih.ch/facilities

www.fih.ch/hockeyturf