In the context of Beechwood, a 'state of the art' campus reflecting a confident emerging city-region, the sponsors have ambitions to produce a modern complex featuring a number of iconic buildings. The Regional Sports Centre is being planned for the highest ground on the new campus site, so its prominence invites aspirational architecture. One possible approach would be to encapsulate the track in a modern lightweight steel frame covered with air-filled EFTE (ethylenetetrafluoroethylene) polymer material. Typical installations comprise several layers of this material treated to provide the required degree of translucency, colour/s, thermal and insulation properties. These are assembled as connected 'pockets' and can be mounted in a variety of pre-fabricated structures including domes, masted 'big top' tents and custom freeform shapes. This material has a life expectancy of over 25 years, it is lightweight (2% of its equivalent in glass), capable of large spans, highly flexible in shape and







installation and compatible with other sustainable building technologies such as natural 'earth tube' ventilation systems. Visually arresting buildings are possible and these can have a particularly striking 'beacon' appearance at night when internally illuminated. The technology has a good architectural design awards record with diverse landmark facilities.

## **MAKING THE VELOPARK A REALITY**

This is a bold once in a generation opportunity. It challenges the North of Scotland cycling community to produce a suitable specification for a dedicated off road cycling complex if this is seen as desirable. If NOSCA support can be agreed, it will be vital to bring the governing body Scottish Cycling and umbrella agencies such as sportscotland on board as key sponsors. Co-operation and help from Highland Council (ECS service) is also paramount, as is Highlands & Islands Enterprise who are leading the campus steering group. These are vital links in terms of direct funding but also as a way into other sources of financial support such as the Lottery and European Regional Development funds. A prominent 'champion' from the sport would also provide punch and credibility – an early approach to Craig MacLean might be followed up for example?

Delivery in such a limited timescale will necessitate formation of a small NOSCA group able to lobby for and front up such a project.

"Again, traffic volume and behaviour was presented as a major barrier to cycling by most people we spoke to, however also highlighted was the need for better leisure facilities, such as bmx tracks, and easy access to those by bike. The enjoyment of cycling as a leisure activity came across strongly, and people want more opportunities to get outdoors and stay active."

(Inverness has its Say, 11 Sept 2008, Cycling Action Plan for Scotland CAPS)

# A VeloPark for the North of Scotland?



## **SUMMARY**

There is a strong momentum of public goodwill and funding for cycling at present. Provision of dedicated cycle facilities in the North of Scotland is dire. A strong and growing customer base exists here. Regional development plans identify a strategic site for a new University campus and Regional Sports Centre at Beechwood, Inverness. Highlands & Islands Enterprise is leading a consortium of agencies aiming to develop these core facilities by 2013.

UK cycling prowess has hitherto relied on a limited resource of world class track and off road provision. Scope exists to include a modern cycling complex in the UHI campus masterplan. Provisionally this might comprise a low cost velodrome, skills area, BMX track and a closed racing circuit integrated with shared multi-sport changing, ancillary and visitor facilities. This can only be achieved if local cyclists are prepared to lobby through the governing bodies and commit to support.



#### **BACKGROUND**

An unprecedented set of opportunities has emerged for cycling in the North of Scotland. The UK's recent dominance of the sport globally has created a wave of public enthusiasm and political support at all levels. This high profile together with the sport's capacity to deliver major benefits for society in terms of the economy, health, personal mobility and reduced carbon emissions is now being factored into key Government investment programmes.

Community participation in cycling regularly polls as a leading UK leisure activity but many riders are deterred by the worsening traffic conditions and poor infrastructure. These are a concern to parents and impede recruitment of young entrants to the sport. Significant investment in new off road cycling facilities is underway and more is planned nationally. However, there remains a serious regional imbalance in provision within Scotland. With the exception of some world class mountain biking venues, the North lacks a nucleus of cycling facilities capable of better developing core skills, lifting sporting excellence and encouraging a wider rider profile.

This deficiency sits at odds with the prevailing demographic trends which have seen rapid population increases in the North of Scotland over the past thirty years – more than 300,000 people are now resident in Highland/Moray (2007). Growth has been most pronounced around the Inner Moray Firth and was further enhanced by the recognition of Inverness as Scotland's sixth city in 2000. The Scottish Government is strongly committed to bringing equality of opportunity across the country. Its development agencies together with sports governing bodies have declared a specific focus on the cities as regional centres of excellence in the future.

Forward planning already makes provision for an extra 30,000 residents to be accommodated in the A96 (East Inverness–Nairn) Corridor by 2040 – a doubling of the immediate population. This additional 'critical mass' of people will require very substantial investment to build commensurate social facilities, including those for local sport and recreation. Contrary to past practice, the planning for these communities will also incorporate dedicated cycling and pedestrian routes throughout the A96 Corridor, leading to increased local demand and bike usage.

Central to the development focus in this area are major transportation projects. Inverness airport is set to expand by growing its role both as a regional transport hub for the Highlands & Islands and providing frequent feeder services to a wide range of UK and continental destinations. In addition to planned dualling of the A96, a major priority is to connect this route with the A9 and A82 by a new high capacity road skirting Inverness, the TLR (Trunk Link Road). Other investments include additional local rail services and the provision of new stations serving Culloden and the Airport. These transportation enhancements should greatly facilitate accessibility to the city from the surrounding region (as well as for the two million plus tourists and visitors passing through Inverness each year). They also create a powerful 'nodal' location at Beechwood where most of these improved transport systems will converge in the future.

A key feature of the A96 Corridor planning framework is the proposed relocation of Inverness College onto a new UHI (University of the Highlands & Islands) Campus. This is a strategic development priority for a powerful group of agencies who appreciate the transformational potential of underpinning full 'varsity status for the city. A 215 acre site at Beechwood (overleaf) is being acquired by HIE (Highlands & Islands Enterprise) to facilitate this project and an outline masterplan will be unveiled shortly. Development will commence in 2011 with completion of the first phase projected for 2013. In addition to its core academic facilities, the campus will incorporate allied business space, residences for staff/students and a new Regional Sports Centre. The latter is seen as being integral to the quality of student 'offer' that Inverness can pitch against competitor

universities. It will also provide state of the art leisure facilities for the local and wider city-regional communities, as well as specialist training for those emerging and elite athletes from the North currently dependent on provision in the distant Central Belt.

These factors combine to form a unique (but brief) window of opportunity for cycling.

#### CYCLING FACILITIES

"Quality facilities are fundamental to the strategy's delivery. The availability, accessibility and quality of facilities influence whether people take part in sport, which sports they enjoy, how often they participate and how well they perform."

(National Sports Strategy – Reaching Higher : Building on the Success of Sports 21).

"Research has shown that cycling is one of the top activities of choice for the children of Scotland, however despite this there remains a low take up rate of organised cycling activities. This is largely as a result of a lack of dedicated centres for activity.

In order to enhance development pathways and support [the national velodrome] to ensure its sustainability, additional facilities require to be provided throughout Scotland. These include:

- Mountain bike tracks and trails
- Hard surface all weather tracks
- BMX tracks
- Traffic free road circuits

It is the aim of the SCU that an adequate network of cycling facilities shall be accessible throughout the country in order that cycling can maximise its contribution to the social, health, economic and sporting policies of Scotland.

The definition of an acceptable cycling facility is "a venue where cycling can be undertaken in a safe environment". This may include places where safe tuition and training can be carried out, a site where children and adults can be taken by their school, school club or community club to participate in cycling and be coached in a safe purpose built environment."

(Scottish Cycling Union Facilities Strategy, 2003).

Track performances at Olympic/World championships by the UK team and at the Commonwealth Games by Scotland have underpinned cycling's recent pre-eminence. Scotland is home to just three ageing outdoor velodromes where up to a third of events can be disrupted by bad weather:-

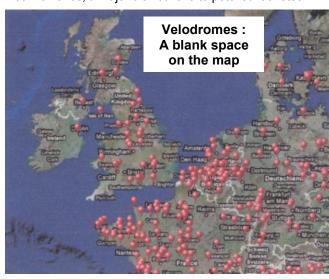
- Meadowbank, Edinburgh: 250m. wooden track, max 43° banking, seating for 500.
- Caird Park, Dundee: 402m. asphalt track

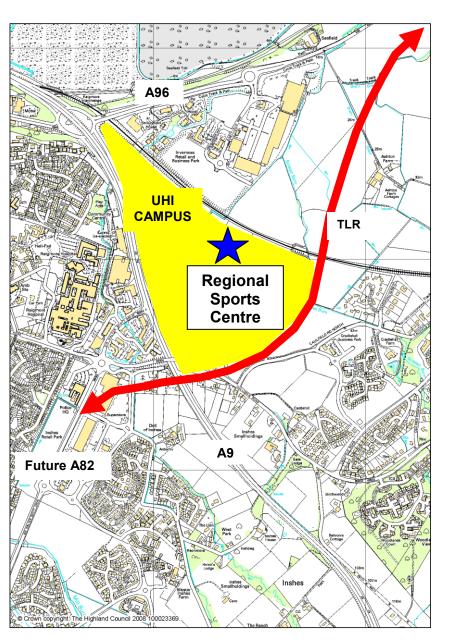
 Bellahouston Park, Glasgow: 420m. 'all weather' concrete track, max. 7° banking.

By contrast, New Zealand with 80% of Scotland's population is home to 24 velodromes, many of them such as Dunedin and Invercargill constructed in recent years (see photos). The Meadowbank track is currently earmarked for demolition which has provoked a campaign seeking an indoor replacement, possibly as part of a new multi-sports complex in Leith. However, the focus for Scottish Cycling is the creation of a new indoor velodrome capable of seating up to 4000 spectators in time for the 2014 Commonwealth Games scheduled for Glasgow. This will become the national cycling HQ and training centre, and is estimated to cost £10m.



The North of Scotland has produced fine Olympic track competitors such as Craig MacLean, Eddie Alexander and other notable talents including Ivor Reid. However, the current distribution of velodromes (see map below) places real handicaps in terms of extra travel costs and inconvenience, a major disincentive to potential athletes.





Creation of such a facility on the UHI campus would remedy this situation whilst assisting UK and Scottish Cycling in the delivery of their targets for traffic-free regional cycling centres/academies. Inverness already hosts the Highland Institute of Sport and Coaching Highland organisations – Scottish Cycling are also advertising for a H&I Regional Development Coach to co-ordinate 'go ride' schools and youth training who could be based at the VeloPark.

The term 'velopark' is taken from the new facilities which are being planned for the 2012 Olympics at Stratford, East London. Here the velodrome will form the nucleus of a cycling complex including warm up and skills areas, a BMX arena, one mile road race circuit and four miles of mountain bike/cyclocross tracks. Although space for the Regional Sports Centre at Beechwood is at a premium, the site is large enough to accommodate some suitably down-scaled ancillary facilities along similar lines. With proper planning,

for example, off-road circuit/s could be fashioned to skirt areas dedicated to pitches and structural landscaping. Beechwood is predominantly flat and it would be useful to engineer some topographical variations into such circuit/s.

What type of velodrome should be built? Modern international standards require a length such that a whole or half number of laps give a distance of 1km. Nearly all indoor velodromes are now constructed to 250m. although 133m and 200m tracks are possible (but more steeply banked). These are surfaced in wood or synthetics. velodromes are typically larger at 333m. 400m or 500m. and finished in asphalt or concrete. Infield areas may be arranged as pitches or courts capable of use by other sports or indeed for occasional non-sporting events. Facilities for sitting/standing spectators, changing/medical/workshop and toilets, as well as specialist timing/results and judges' accommodation are required. Some of these could be shared in the context of a large multi-sports centre.

Inevitably costs are a major consideration. An outdoor track and basic facilities could be erected for approximately £1m. Whilst this would represent a considerable advance on the status quo, it is arguably a midtwentieth century format and hostage to the more severe climate and daylight conditions of the North. A covered velodrome offers better comfort and

utility but brings higher capital and running costs. Tentative estimates for a low cost indoor facility hover around the £4m. mark (for example the Leith proposal). There are specialist velodrome designers (egs. Ralph Schuermann and Peter Junek) who offer turnkey project capability.

