

TO : CITY MANAGER  
DATE: 1994 AUGUST 04

FROM : DIRECTOR RECREATION AND CULTURAL SERVICES

RE : REQUEST FROM CYCLE B.C. MOUNTAIN BIKE DIVISION TO DEVELOP A  
MOUNTAIN BIKE RIDING AND TRAINING TRAIL IN BURNABY

PURPOSE : To request authority to proceed to an agreement with Cycle B.C.  
for the development of a mountain bike trail.

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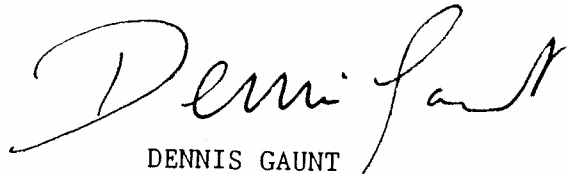
RECOMMENDATION:

1. THAT approval be given to work with Cycle B.C. towards a formal agreement for the development of a mountain bike trail at the base of the north side of Burnaby Mountain adjacent to the Velodrome as outlined in this report.

REPORT

At its meeting of 1994 August 03, the Parks and Recreation Commission received the attached staff report on the above subject and adopted the two recommendations contained therein.

Upon completion of a proposed agreement to develop the mountain bike trail, a further report will be brought back to the Commission and Council for final approval.



DENNIS GAUNT  
DIRECTOR RECREATION &  
CULTURAL SERVICES

tc  
Attachment  
A/2840

cc: Director Planning & Building  
City Solicitor

ITEM 4  
DIRECTOR'S REPORT NO. 13  
COMMISSION MEETING 94/08/03

SUBJECT: REQUEST FROM CYCLE B.C. MOUNTAIN BIKE DIVISION TO DEVELOP  
A MOUNTAIN BIKE RIDING AND TRAINING TRAIL IN BURNABY

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RECOMMENDATIONS:

1. THAT approval in principle be given to the development of a mountain bike trail at the base of Burnaby Mountain on the north side as illustrated on the attached site map (Attachment #1).
2. THAT upon completion of a suitable trail design, and terms of reference with Cycle B.C., a request be made of Council to prepare a lease that would facilitate the construction, maintenance and programming of the trail.

REPORT

The Commission received a request 1994 March 02 from the mountain bike division of Cycle B.C. to redevelop an existing trail in the N.E. sector of Burnaby Mountain Park and Stoney Creek, for the purpose of mountain bike riding and training.

Through a series of discussions with the organization, it was agreed that the requested site was not a suitable location. The preference is for a location where bike riding would not conflict with pedestrian trail users and not put other more accessible trails and natural areas of the Mountain at greater risk of deterioration.

Mountain bike riding and more specifically off-road riding, is becoming a major recreational activity and a growing competitive sport. Riders are seeking trails that are challenging and safe. Existing trails in Burnaby's parks are designed for pedestrians, joggers and, in specified areas, horses.

There is currently no designated mountain bike trail within the park system. Mountain biking is a healthy and skillful outdoor sport and recreational activity. It is recommended that the proposal to develop a specialized trail for the activity be supported. The development of a trail for mountain bikers would be an asset to our community's health, and it would help protect the existing park trails and forest areas.

Central Park and Burnaby Mountain Park are experiencing increasing damage to tree root systems, and trails for mountain bike riding.

A designated trail for mountain bikes would provide the desired challenges and safety for riders. A review of suitable trail sites was carried out. The recommended location for the development of a mountain bike trail is on a parcel of park land east of the Velodrome site on the north side of Burnaby Mountain.

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The land is undeveloped. Access to the site is restricted by steep slopes and the Barnet Highway to the north. There is no direct access to the rest of Burnaby Mountain because of very steep north face slopes.

The trail design and mountain bike program will be developed in a manner that is compatible with the topography and environment. An environmental assessment will be an integral part of the design process.

A parking proposal will be developed for review. It would be the objective to operate the trail program in a manner that would be compatible with the Velodrome services. Schedules of events and programs would be coordinated to ensure the velodrome parking would service both programs and recreational users.

The Velodrome and its parking area would serve as a staging point for the riders. The trail proposal is detailed by the Association in the attached letter (Attachment #2). For legal purposes the City would deal with Cycle B.C., the organization that already holds the lease on the Velodrome property.

It is recommended that the Association be given permission to construct a trail to agreed to standards, within the designated area. The trail would be leased to Cycle B.C. for the purpose of teaching riding skills, hosting competitions, training and recreational riding. Cycle B.C. would be required to indemnify the City. They would be responsible for managing and maintaining the trail to a standard that is safe for recreational and competitive mountain bike riding.

The trail must be constructed in a manner that will protect the area and natural vegetation against erosion and damage from the bikes. The trail will be designed around the natural features and in a way that protects the trees. The Parks staff will work closely with the Association to ensure the trail is constructed to agreed to specifications.

Next Steps in the Process

If the Commission approves this report, the following steps will then take place:

1. A report will be sent to City Council requesting approval in principle and authority to work out the details of a lease.
2. City staff including Parks, Planning and Legal, will sit down with Cycle B.C., the same organization that has the current lease on the Velodrome site and either prepare a second lease or extend the original lease, whatever is the most suitable.

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3. The proposal would go through whatever normal City planning process is called for on such projects, including site analysis and environmental impact.
4. The terms of this lease and the proposal will then come back to the Commission and Council for approval.
5. If approved, B.C. Cycle would then be given authority to proceed to prepare the mountain bike trail.

ND:ps:seo  
Attachments (2)  
COMMISSION/0176

cc: Director Planning & Building  
City Solicitor

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VELEDROME

PROPOSED MOUNTAIN BIKE  
TRAIL AREA

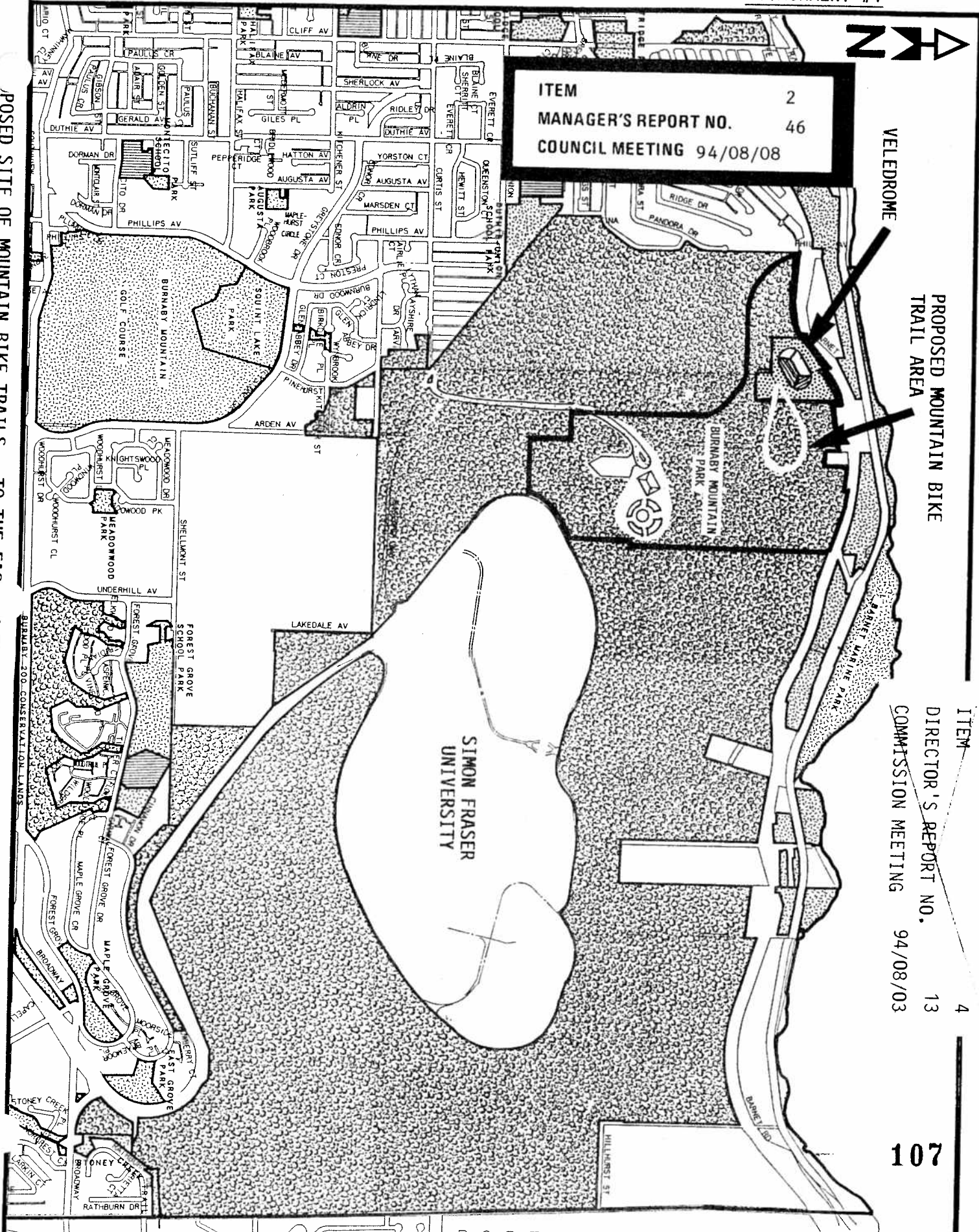
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PROPOSED SITE OF MOUNTAIN BIKE TRAILS - TO THE EAST OF THE HARRY JEROME SPORTS CENTRE VELEDROME



**The Burnaby Mountain Legacy Loop**

A proposal by the Burnaby Mountain Bike Club to develop a permanent mountain bike training center

In 1996 Canada will send two mountain bike racers to represent our country in the first Olympic mountain bike race to be held July 21 at Rockdale, Atlanta. Our Canadian cycling team will include one male and one female rider, both will compete in a cross country event in separate categories. There is an excellent chance one or both of these athletes will be from B.C., Alison Syndor and Bruce Spicer are both from the lower mainland. Unfortunately there are few places in the lower mainland that offer suitable training for these athletes.

The local trails where mountain biking is legal either do not offer the necessary challenge or are busy multi-use trails where training rides are not appropriate. The **Legacy Loop** is a unique mountain bike area that when combined with the facilities that will be available at the new velodrome would create an excellent training center. The **Legacy Loop** would be a trail loop without any intersections, it would have permanent markers indicating terrain changes that are required for sanctioned events and the direction of traffic flow would be controlled. The **Legacy Loop** would be constructed to encourage use by mountain bikers of all ages and abilities.

The Burnaby Mountain Bike Club has successfully restored trails through volunteer work days and the use of natural building materials. We are developing new trail building techniques that deal specifically with local weather conditions and heavy mountain bike traffic. The Burnaby Mountain Bike Club, Ken Legge and I hope we can work with you to develop this unique mountain bike facility for the developing local riders and the national stars who represent our province at national and international competition.

M. David Eades



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MEMO

**Location**

The **Legacy Loop** would be located on the bench lands behind the the velodrome site extending from the parking area to the boarder between Burnaby municipal land and SFU land east of the velodrome site.

This is an ideal location for the **Legacy loop**, the geographic features of the area will keep the those interested in mountain bike racing and training seperate from other trail users. The slope that leads up to the SFU trail system is too steep to ride up and the Barnett highway seperates the area from the marine park on the inlet. The velodrome site provides parking and will provide washroom facilities upon completion. The velodrome will also become a regional development center for all cycling disciplines providing office space for Cycling BC, member services and athlete services such as on site coaching programs.

The terrain in this area is also quite suitable for the development of mountain bike athletes. The area offers rolling terrain with some demanding climbs and technical challenges. The soil in this area appears to be well drained mineral soil suitable for mountain biking through out the year. While the course would be designed with competitive cyclists in mind it would be suitable for cyclists of all ages and skill levels.

**Safety Features**

The **Legacy Loop** would be a closed course with one staging area and access point at the velodrome building site. The course will have permanent markers indicating terrain changes and the direction of travel as required by the national mountain bike regulations of the Canadian Cycling Association. The trail bed and corridor will also be built in accordance with the mountain bike regulations of the CCA. Care will be taken to insure the sight lines of the course are clear for maximum visibility and rideability.

**Construction Standards**

The **Legacy Loop** would be constructed in accordance with Burnaby Parks and Recreation standards for mountain bike trails. If Burnaby does not have a trail standard of this type of trail you may consider adopting the bicycle trail standards developed by BC Parks. I have included the park facility standards for type 3 and 4 bicycle trails.

The type 3 trail has an unsurfaced trail bed of native soil cleared to 1 - 1.5m with a tread width of .5 - .7m. and trail obstacles up to 10cm high. The skill ratings are easy to more difficult and the trail bed may be rough at times. Slopes go to a maximum of 10% over 30m on easy trails and to a maximum of 22% of 45m. The curve radius is a minimum of 2m and the trail corridor is cleared to 2.4m.

The type 4 trail has an unsurfaced trail bed comprised of native soils cleared to a width of 1 meter. The tread is .3 - .5 with trail obstacles up to 30 cm high and sometimes rough. The skill rating is generally more difficult to most difficult. Slopes may be steep and challenging on occasionally rough terrain with the maximum grade to 25% over 90m and a maximum sustained grade to 15%. The curve radius typical of type 4 trails is between 1.2 and 1.5m. The cleared height of the trail corridor would be at least 1.8m.

The standard length of these trails ranges from 10 to 80km. The proposed area will not provide a trail in this distance range however it will meet all of the other standards. The distance of one

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lap is less of an issue however as most riders will ride multiple laps to cover the distance their skill and fitness level allows.

### Volunteer Work Days

The Burnaby Mountain Bike Club has scheduled trail maintenance days once a month for over two years. The club members are currently looking for a project to develop in conjunction with interested an interested land manager. We build trails using volunteer labour and native materials aquired from the site. We employ a land scaping technique when gathering building materials that leaves the area's natural appearance in tact.

The club members have aquired trail building experience over the past two years relating specifically to mountain bike trails in the wet climate of Burnaby Mountain. We have enlisted the support of several local bike shops who provide draw prizes for those participating in the trail maintenance days. I believe we can encourage other local businesses to get involved with this project if it is approved.

The Burnaby Mountain Bike Club is affiliated with Cycling BC. This association provides third party liability insurance to it's members when riding their bikes and working on trails. Special event liability insurance is also available from Cycling BC for trail maintenance and construction days. Non-members are not covered however 1 day memberships are available at events sanctioned by Cycling BC and participants can purchase these before comencing work.

### Aditonal Features

The **Legacy Loop** can be built to provide additional facilities for entry level riders and children. Special features such as a trials riding course and skill development centre. The use of a connector link with properly designed merging areas would allow entry level riders and kids to use the loop without interfering with more advanced riders. The speed of the more advanced riders will be controled through terrain undulations on the approach to and in the merge areas. these areas would also be clearly signed.

The staging area will provide ample room for riders to prepare to ride and enter the course without interfering with riders on the trail. A map sign would also be installed in this area describing the course and outling proper trail ettiquette, and the rules one must abide by while using the **Legacy Loop**.

I look forward to discussing this proposal further with you Neil, the club and I hope this will be the first of many trail projects we can work on together. I can be reached at 420-6616 week days between 8:30am and 5:00pm or at home at 931-3985.

Sincerely, the members of the Burnaby Mountain Bike Club.

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