



**Coimisean | Forestry**  
**na Coilltearachd | Commission**  
Alba | Scotland

Mr Niall R Thompson  
[REDACTED]  
[REDACTED]  
[REDACTED]

**Forest Enterprise**  
**Head Office Scotland**  
1 Highlander Way  
Inverness Business Park  
Inverness IV2 7GB

Fòn/Tel: 01463 232811  
Facs/Fax: 01463 243846  
hugh.insley@forestry.gsi.gov.uk

Dr Hugh Insley  
Àrd-Oifigear / Chief Executive

30 April 2009

Our ref: SEC/09/37

Dear Mr Thomson

**ICO Case Reference: FS50187763**

As per the Information Commissioner's decision notice please find enclosed the information which you requested on 10 August 2007. This includes:

1. The consultant's brief for the West and Central Scotland Forest Cycling Development recommendations October 2005. The report cost £33,000 plus VAT with contributions as follows:
  - Argyll and Island Enterprise: £8521
  - Scottish National Heritage - £5000
  - Scottish Enterprise Forth Valley - £4527
  - Lochaber Enterprise £976
  - Forestry Commission Scotland (FCS) - £13976

The findings fed into the national FCS study to build a clear picture of mountain biking across the country. Subsequent developments have included waymarking family friendly trails at Loch Ard. The study also fed into the national strategic framework study.

2. A copy of the Heads of Terms for the Clanranald Medieval Fort Project.
3. The consultant's brief for 'FCS – an ambition for forest cycling and mountain biking'. The report cost £20680 and was paid for by the Forest Tourism Initiative, a partnership project involving FCS, Visit Scotland, Scottish Enterprise and Highlands and Islands Enterprise. The partners were consulted regularly during the study and additional public, private and voluntary sector organisations were consulted as part of the study. Once the framework document was in final draft form it was placed on the FCS website and was open to feedback from all interested parties. The breakdown of responses was as follows:



1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability in the organization's operations.

2. The second part of the document outlines the various methods and tools used to collect and analyze data. It highlights the need for consistent and reliable data collection processes to ensure the validity of the results.

3. The third part of the document discusses the challenges and limitations of the current data collection and analysis methods. It identifies areas where improvements are needed to enhance the accuracy and efficiency of the process.

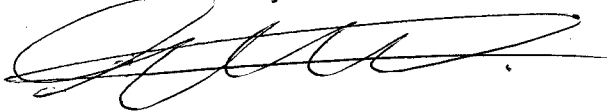
- individual consumers - 8
- MTB/cycling groups - 4
- national organisation - 2
- community group - 1
- local authorities - 3
- TOTAL: 18

Most of the responses were short notes supporting the idea of trail development at specific sites. Others were more comprehensive letters, addressing points raised in the study, in some cases referring to specific sites and in other cases taking a national view.

The study's findings and consultation responses have formed the basis for the development of a National Strategic Framework.

4. There is no written evidence regarding your final point on FCS document MB 12/07. If you have any questions please let me know.

Yours sincerely



Nicky Whitaker  
Secretariat & Partnerships Manager

Encs



# A Cycling strategy for Forestry Commission Scotland

## Introduction

Forestry Commission Scotland (FCS) is commissioning the preparation of a draft strategy for the management of existing and potential new developments for sustainable cycling facilities and services on the National Forest Estate in Scotland. This document, which will be suitable for issue as a consultation publication, will build on studies done recently, filling in any geographical gaps, integrating with FCS expertise and thinking and will form the basis of the FCS cycling/mountainbiking strategy for the next 3 – 5 years.

## Background

FCS is the market leader for forest cycling and mountainbiking in Scotland, and is also accepted as a world leader in mountainbike trail building. Scotland was recently voted amongst the hottest places to ride in the world, by IMBA readers, which is testament to the success of FCS in this competitive marketplace.

The internationally-known sites are the 7stanes in the Scottish Borders/Dumfries & Galloway and Leanachan at Fort William (where the UCI mountainbiking World Cup has taken place a number of times and where the World Championships will take place in September 2007).

Over and above these, there are huge numbers of purpose-built or recently-adapted mountainbiking sites throughout the country, which perform either a regional or local role, as well as many sites where local riders use unofficial trails.

The full range of expert sport and enthusiast to entry-level beginner trails is either available or could be developed across Scotland.

Forest cycling (as opposed to mountainbiking) is a different product, one which requires little or nothing in terms of specialist construction, as it takes place, generally, on existing forest roads or waymarked trails.

'Trailquest' is another cycling product (orienteering on a bike), which has a number of sites throughout Scotland on FCS land, but which is little-known and therefore less used. It is usually family-friendly, or available for participation on a variety of skills levels.

Cycling now takes place against a background of legal responsible access as provided for in Scottish access legislation. This has placed responsibilities and challenges for land managers to ensure that facilities meet the needs of all users of the countryside whether they be walkers, horse-riders or cyclists.

In terms of market knowledge, a new piece of research has been commissioned by VisitScotland, with some input from FCS. This will explore the different markets for cycling (holidaymakers who cycle as part of their holiday and specialist cycling holidaymakers), with reference to the Scottish cycling product.

There exists also some research on the value and economic benefit of cycling, with more being undertaken during 2005 (as part of the 'Valuing Forest Recreation Activities' study), plus economic evaluation of the 7stanes phase 1 project.

Cycling can meet a number of requirements of the Scottish Executive: health, social inclusion, economic/community development and tourism and should all be included within this strategy.

### Objectives of this commission

#### Rationale

- A/ Determine and set out the potential market for mountainbiking and forest cycling on the FCS forest estate. This should be considered in the context of emerging cycling provision throughout Scotland.
- B/ Determine the socio-economic impact for the different areas of Scotland (see appendix 1 for area definition), including any perceived anomalies within a particular area.
- C/ Evaluate each FCS site in terms of potential visitor experience (driving time, views, forest structure, quality of trails, available facilities). Where there is another landowner's cycling site within the same catchment area, a snapshot of the visitor experience on that site would also be expected.
- D/ consider the scale of development for each area: this should be on the scale of Nationally Important, Regionally Important, Locally Important or Not Suitable for Development.
- E/ consider the type of customers, trail type and grading most suitable for each site/area
- F/ Where available, examine how the sites are currently promoted (including events) and make resulting recommendations for how marketing could be optimized in future. This should fit with work done by other bodies e.g. VisitScotland.
- G/ Suggest a structure for modules of best practice in this sector for management, maintenance and monitoring: these modules will be available alongside this strategy for FCS and other partners.

#### Policy and strategic direction

- A/ Draft a policy statement based on the above rationale for the National Forest estate
- B/ Set out aim and objectives for FCS in the management of cycling on the national Forest estate
- C/ Order priorities for maintenance of existing facilities and services, and also opportunities for future investment in new developments
- D/ Make proposals for sufficient monitoring and evaluation

## Issues to consider

- Public road access.
- Public transport (with/without bike carrier) access.
- Requirement for additional facilities such as extra parking, Bike shed, café & changing facilities.
- Existing local infrastructure (catering, accommodation, bike-hire/repairs, tour operators).
- Social and economic benefit to the local economy.
- Points of interest (views, variety).
- Forest structure (variety of species, age range, open space).
- Robustness of sites (terrain, soil types).
- Potential for variety of routes / abilities.
- Potential market and customer profile.
- Marketing of this and other forest/cycling facilities.
- Relation to other cycling facilities in Scotland.
- Potential conflicts of interest (other recreation uses, conservation, harvesting, neighbours).
- Refer to "Towards a Cycling Strategy for Scotland" [http://www.forward-scotland.org.uk/about\\_us/publications.cfm?uuidPublication=02C647B5-2B33-DE5E-DC88B604E987DF83](http://www.forward-scotland.org.uk/about_us/publications.cfm?uuidPublication=02C647B5-2B33-DE5E-DC88B604E987DF83).
- International and UK good practice

## Key tasks to be covered in the document

- I. Put the study into the context of other adventure and outdoor activities. Consider the question of displacement and the impact this might have for the viability of existing facilities which FCS and others have invested in.
- II. Consider the scale and priority of development.
- III. Survey, analysis and recommendations for the best location(s) with regard to the issues listed above.
- IV. There has been incredible growth in cycling and in particular mountain biking. The study should consider whether this growth is sustainable, are we missing potential customers and what the implications might be if there was some form of downturn in the activity and or the economy.
- V. Feedback on local consultations with regard to the proposals and show support or otherwise for the recommended location(s).
- VI. Developed outline options which could allow phased programme of project developments including facilities and related infrastructure with trails of varying levels, cost the construction of the projects in terms of capital and revenue and identify potential sources of income and other funding contributions.
- VII. Identify, where possible, potential business opportunities (for FCS and/or commercial organisations) linked to the cycling developments.

## Timescales & reporting

Completion of first draft of study by 15 July 2005. The management of the study will be by Fiona Murray, Forest Tourism Initiative, based at Silvan House. A contact list is provided in appendix 2.



## Appendix 2: useful contacts

Fiona Murray  
Forest Tourism Initiative Manager  
based at Forestry Commission Scotland  
Silvan House  
231 Corstorphine Road  
Edinburgh EH12 7AT  
Tel: 0131 314 6140  
Fax: 0131 314 6152  
mobile: 07795 666 251  
[fiona.murray@forestry.gsi.gov.uk](mailto:fiona.murray@forestry.gsi.gov.uk)

Alan Stevenson  
Head of Communities, Recreation & Tourism  
Forestry Commission Scotland  
Forest Enterprise Scotland Head Office  
1 Highlander Way  
Inverness IV2 7GB  
Tel: 01463 252 668  
Fax: 01463 714 978  
[Alan.stevenson@forestry.gsi.gov.uk](mailto:Alan.stevenson@forestry.gsi.gov.uk)

Steve Duncan  
Marketing Manager – Active  
VisitScotland  
Ocean Point One  
94 Ocean Drive  
Edinburgh  
EH6 6JH  
Tel: 0131 472 2367  
Fax: 0131 472 2250  
[Steve.duncan@visitscotland.com](mailto:Steve.duncan@visitscotland.com)

Jillian Swankie  
Product Development Manager - Active  
VisitScotland  
Ocean Point One  
94 Ocean Drive  
Edinburgh  
EH6 6JH  
Tel: 0131 472 2401  
Fax: 0131 472 2250  
[Jillian.swankie@visitscotland.com](mailto:Jillian.swankie@visitscotland.com)

Mareike Bode  
Research Assistant  
VisitScotland  
Ocean Point One  
94 Ocean Drive  
Edinburgh  
EH6 6JH  
Tel: 0131 472 2391  
Fax: 0131 472 2250  
[Mareike.bode@visitscotland.com](mailto:Mareike.bode@visitscotland.com)

Cowal and Trossach Forest District  
Stuart Chalmers  
Tel 01877 382383  
Email: [stuart.chalmers@forestry.gsi.gov.uk](mailto:stuart.chalmers@forestry.gsi.gov.uk)

Lorne Forest District  
Elaine Jamieson  
Tel 01631 566155  
Email: [Elaine.Jamieson@forestry.gsi.gov.uk](mailto:Elaine.Jamieson@forestry.gsi.gov.uk)

Scottish Lowlands Forest District  
Rena Tarwinska  
Tel 01555 660190  
Email: [Rena.Tarwinska@forestry.gsi.gov.uk](mailto:Rena.Tarwinska@forestry.gsi.gov.uk)

West Argyll Forest District  
Colin Hossack  
Tel 01546 602518  
Email: [colin.hossack@forestry.gsi.gov.uk](mailto:colin.hossack@forestry.gsi.gov.uk)

Galloway Forest District  
Keith Muir  
Tel: 04671 402 420  
Email: [keith.muir@forestry.gsi.gov.uk](mailto:keith.muir@forestry.gsi.gov.uk)

Ae Forest District  
Bill Coombes  
Tel: 01387 860 247  
Email: [bill.coombes@forestry.gsi.gov.uk](mailto:bill.coombes@forestry.gsi.gov.uk)

Scottish Borders FD  
Jeremy Thompson  
Tel: 01750 721 120  
Email: [jeremy.thompson@forestry.gsi.gov.uk](mailto:jeremy.thompson@forestry.gsi.gov.uk)

Tay Forest District  
Chris Ford  
Tel: 01350 727 284  
Email: [Chris.ford@forestry.gsi.gov.uk](mailto:Chris.ford@forestry.gsi.gov.uk)

Kincardine FD  
John Mackie  
Tel: 01330 844 537  
Email: [john.mackie@forestry.gsi.gov.uk](mailto:john.mackie@forestry.gsi.gov.uk)

Buchan FD  
Ewan Reid  
Tel: 01466 794 161  
Email: [ewan.reid@forestry.gsi.gov.uk](mailto:ewan.reid@forestry.gsi.gov.uk)

Moray FD  
Jim Lauder  
Tel: 01343 820 223  
Email: [jim.lauder@forestry.gsi.gov.uk](mailto:jim.lauder@forestry.gsi.gov.uk)

Inverness FD  
Jack Mackay  
Tel: 01463 791 575  
Email: [jack.mackay@forestry.gsi.gov.uk](mailto:jack.mackay@forestry.gsi.gov.uk)

Fort Augustus FD  
Kenneth Knott  
Tel: 01320 366 322  
Email: [kenneth.knott@forestry.gsi.gov.uk](mailto:kenneth.knott@forestry.gsi.gov.uk)

Lochaber FD  
Craig Millar  
Tel: 01397 702 184  
Email: [craig.millar@forestry.gsi.gov.uk](mailto:craig.millar@forestry.gsi.gov.uk)

Dornoch FD  
Donald MacNeill  
Tel: 01862 810 359  
Email: [donald.macneill@forestry.gsi.gov.uk](mailto:donald.macneill@forestry.gsi.gov.uk)

7stanes project  
Karl Bartlett  
Tel: 01387 272 440  
Email: [karl.bartlett@forestry.gsi.gov.uk](mailto:karl.bartlett@forestry.gsi.gov.uk)

Investment FD  
Jack Mackay  
Tel: 01883 701 575  
Email: [jack.mackay@invest.gov.uk](mailto:jack.mackay@invest.gov.uk)

Port Augusta FD  
Kenneth Knox  
Tel: 01320 300 333  
Email: [kenneth.knox@port.gov.uk](mailto:kenneth.knox@port.gov.uk)

Loorston FD  
Craig Miller  
Tel: 01307 702 184  
Email: [craig.miller@loorston.gov.uk](mailto:craig.miller@loorston.gov.uk)

Donnall FD  
Donald MacNeill  
Tel: 01882 810 388  
Email: [donald.macneill@donnall.gov.uk](mailto:donald.macneill@donnall.gov.uk)

Tarans project  
Kah Bahell  
Tel: 01287 572 440  
Email: [kah.bahell@tarans.gov.uk](mailto:kah.bahell@tarans.gov.uk)

## West Central Scotland Cycling Feasibility Study

### **Introduction**

Forestry Commission Scotland (FCS) in partnership with Scottish Enterprise Forth Valley (and potentially Argyll and Island Enterprise) are commissioning a feasibility study onto the potential for socially, economically, and environmentally sustainable cycling facilities across four forest districts: Cowal and Trossachs Forest District, Lorne Forest District, Scottish Lowlands Forest District & West Argyll Forest District.

### **Background**

FCS has become the market leader in forest cycling in Scotland. Internally renowned facilities have been developed in Fort William and Glentworth. Currently there are no national or regional level cycling sites in West Central Scotland and there is increasing pressure for development to both meet the needs of local cyclists, develop local economies and to provide additional recreation provision to the large populations in central Scotland. The purpose of the feasibility study is to ensure that future cycling provision in the West Central region is considered on a strategic level to ensure maximum impact from any resources invested. This study will inform the emerging FCS Scottish Cycling Strategy.

The potential locations for the developments are:

Cowal and Trossachs Forest District

1. Trossachs (centred on David Marshall Lodge)
2. Ardgartan
3. Glenbranter (possibly twinned with Ardgartan)
4. Dunoon

Lorne Forest District

5. Glen Orchy to Crainlarach
6. Oban Area (Fearnoch & Barcaldine)
7. Glen Coe & Glenachullish

Scottish Lowlands Forest District

8. Arran
9. Carron
10. Kelty

West Argyll Forest District

11. Knapdale
12. Cairnbaan
13. Inverary

A summary of the main issues and a map of the sites are in the appendix (Appendix 2).

### **Objectives of the Study**

- a) Determine the potential market for each of the 13 areas above. This should be considered in the context of the emerging cycling provision in Scotland.
- b) Determine the socio-economic impact for each of the 13 areas.
- c) Evaluate each site in terms of potential visitor experience (driving time, views, forest structure, quality of trails, available facilities)
- d) Consider the scale of development applicable for each of the 13 areas above. This should be on the scale: Nationally Important, Regionally Important, Locally Important and finally Not Suitable for Development.
- e) Consider the type of customers and therefore trail type most appropriate for each site.

## Issues to Consider

- Public road access
- Requirement for additional facilities such as extra parking, Bike Shed, Café & Changing facilities
- Existing local infrastructure (catering, accommodation, bike-hire/ repairs)
- Social and economic benefit to the local economy
- Points of interest (views, variety)
- Forest structure (variety of species, age range, open space)
- Robustness of sites (terrain, soil types)
- Potential for variety of routes / abilities
- Linkage to other facilities in West Central Scotland
- Potential market and customer profile
- Relation to other cycling facilities in Scotland
- Potential conflicts of interest (other recreation uses, conservation, harvesting, neighbours)
- Refer to "Towards a Cycling Strategy for Scotland" [http://www.forward-scotland.org.uk/about\\_us/publications.cfm?uuidPublication=02C647B5-2B33-DE5E-DC88B604E987DF83](http://www.forward-scotland.org.uk/about_us/publications.cfm?uuidPublication=02C647B5-2B33-DE5E-DC88B604E987DF83)

## Key tasks to be covered in the report

- I. Put the study into the context of the market for Scottish biking and other adventure activities. Consider the question of displacement and the impact this might have for the viability of existing facilities which FCS and others have invested in.
- II. Consider the scale and priority of development of cycling development in central west Scotland.
- III. Survey of the potential forests listed above, analysis and recommendations for the best location(s) with regard to the issues listed above.
- IV. There has been incredible growth in cycling and in particular mountain biking. The study should consider whether this growth is sustainable, are we missing potential customers and what the implications might be if there was some form of downturn in the activity and or the economy.
- V. Feedback on local consultations with regard to the proposals and, showing support or otherwise for the recommended location(s).
- VI. Developed outline options which could allow phased programme of project developments including facilities and related infrastructure with trails of varying, cost the construction of the projects in terms of capital and revenue and identify potential sources of income and other funding contributions.

## Timescales, Reporting:

The proposed deadline for the final report is 30 June. The management of the study will be by Stuart Chalmers at Cowal and Trossachs Forest District. A contact list is provided in appendix 1.

PA31 8RS

Tel 01546 602518

Email: [James.anderson-Bickley@forestry.gsi.gov.uk](mailto:James.anderson-Bickley@forestry.gsi.gov.uk)

### **Other FCS Contacts**

1. Alan Stevenson, Communities, recreation and tourism Manager
2. Fiona Murray, Forest Tourism Initiative Manager
3. Karl Bartlett, Seven Stanes Project Manager
4. Steve Williams, Senior Information Officer

### **Non FCS Contacts**

- Glasgow Mountain Bike Club (Peter Siebelt)
- Wheels Scottish Cycle Centre (Mark Schimidzu)
- Mid Argyll Mountain Bike Club
- Stirling Mountain Bike Club
- North Argyll Cycling Club
- Scottish Natural Heritage (Ross Johnson)
- Scottish Enterprise Forth Valley (Paul McCafferty)
- Argyll & Islands Enterprise (Steven Dott)
- Sport Scotland
- Loch Lomond and Trossachs National Park (Bridgett Jones – Access Officer)
- Argyll & Bute Council
- Stirling Council
- Fyfe Council
- Dounans Scottish Outdoor Centre
- Benmore Outdoor Centre
- Ardroy Outdoor Centre

## Appendix 1 – Contacts

### Main Contact for Feasibility Study

Stuart Chalmers  
District Forester Environment  
Forestry Commission Scotland  
Cowal and Trossachs Forest District  
Aberfoyle  
Stirling  
FK8 3UX

Tel 01877 382383

Mobile 07764 838 736

Email: [stuart.chalmers@forestry.gsi.gov.uk](mailto:stuart.chalmers@forestry.gsi.gov.uk)

### Cowal and Trossach Forest District

Stuart Chalmers  
District Forester Environment  
Forestry Commission Scotland  
Cowal and Trossachs Forest District  
Aberfoyle  
Stirling  
FK8 3UX

Tel 01877 382383

Mobile 07764 838 736

Email: [stuart.chalmers@forestry.gsi.gov.uk](mailto:stuart.chalmers@forestry.gsi.gov.uk)

### Lorne Forest District

Elaine Jamieson  
District Forester FM & E  
Forestry Commission Scotland  
Millpark Road  
Oban  
PA34 4NH

Tel 01631 566155

Email: [Elaine.Jamieson@forestry.gsi.gov.uk](mailto:Elaine.Jamieson@forestry.gsi.gov.uk)

### Scottish Lowlands Forest District

Rena Tarwinska  
District Forester Communities and Environment  
Forestry Commission Scotland  
Braxfield Road  
ML11 9BU Lanark

Tel 01555 660190

Email: [Rena.Tarwinska@forestry.gsi.gov.uk](mailto:Rena.Tarwinska@forestry.gsi.gov.uk)

### West Argyll Forest District

James Bickley  
Forestry Commission Scotland  
Whitegates  
Lochgilphead



## 5. Appendix 2 – Main Issues with each site

Location	Issues
1. Trossachs	<ul style="list-style-type: none"> <li>• Mountain Bike report produced by Pete Laing in 2000 identified high potential for area.</li> <li>• Pressure from Glasgow Mountain Bike Club to develop site. Trail develop by club used annually for races.</li> <li>• Currently mix of uses in the area may lead to conflict.</li> <li>• Steep terrain give potential for technical cycling and excellent views.</li> <li>• 2.4 Million people within one hours drive.</li> <li>• Main cycling provision on forest roads</li> <li>• On route of National Cycle Route 7</li> <li>• Current customer base at David Marshall Lodge is mainly family groups.</li> <li>• Within Loch Lomond and the Trossachs National Park</li> </ul>
2. Ardgartan	<ul style="list-style-type: none"> <li>• Area already attracts outdoor pursuits lovers.</li> <li>• The Ardgartan peninsula already used for cycling</li> <li>• Area was identified as a potential cycle area, twinned with Glenbranter, routes identified.</li> <li>• Within one hours drive of a large population from Glasgow. High volume of traffic pass centre.</li> <li>• FCS looking at potential over next year to further develop the Ardgartan visitor centre. This has the potential to encourage people to visit FCS forests in Cowal, West Argyll and Lorne.</li> <li>• Within Loch Lomond and the Trossachs National Park.</li> </ul>
3. Glenbranter	<ul style="list-style-type: none"> <li>• First FCS mountain bike specifics route to be developed in next year.</li> <li>• Area was identified as a potential cycle area, twinned with Ardgartan, routes identified.</li> <li>• The development of mountain biking in this area was seen as a way to bring a new client base to the Cowal area – which is currently seen as the most under visited area of the National Park.</li> <li>• Within Loch Lomond and the Trossachs National Park</li> </ul>
4. Dunoon	<ul style="list-style-type: none"> <li>• Population of over 10,000 live in the Dunoon area.</li> <li>• Dunoon is seen as a priority area for development and regeneration.</li> </ul>
5. Glen Orchy to Crainlarach	<ul style="list-style-type: none"> <li>• There is a strong community drive in Strathfillan (Tyndrum &amp; Crianlarich</li> <li>• Bridge of Orchy lost it's primary school last year and so seems to be becoming more fragile.</li> <li>• Glen orchy is already a focus for outdoor activity drawing on the Glasgow area population. FCS have a cycle trail in the Glen which has further potential, car parking is an issue as is any mention of increased traffic through the glen.</li> <li>• The river is also well used by fishermen and paddle sports. The community has expressed an interest in a walking/cycling link through the glen.</li> <li>• Last year saw an investment in mountain access to a Corbett in the Glen.</li> <li>• Part of the zone is in the NP and there are already plans in motion for a long distance cycle route.</li> <li>• Glen Orchy already has high and at times conflicting use. A focus around Crianlarich or Tyndrum would therefore be appropriate, with long distance trails linking to the Glen eventually.</li> </ul>
6. Oban Area (Fearnoch &	<ul style="list-style-type: none"> <li>• Fearnoch has great potential but is not immediately associated with a population. To reach this site with bikes hired from Oban or Taynuilt</li> </ul>

Barcaldine)	<p>would require travelling with bikes on cars. The village of Fearnoch is small and may be unable to support business opportunities.</p> <ul style="list-style-type: none"> <li>• Barcaldine is already the focus for the newly formed North Argyll Cycling club. A local issue of mtb / walker conflict at Beinn Lora has meant that FCS staff have had to put in a lot of effort to get them to this stage. A community project will develop a site in Barcaldine; this will not preclude further development.</li> <li>• Both of these areas are just off the main road and between 15 and 30 mins from Oban.</li> </ul>
7. Glen Coe & Glenachullish	<ul style="list-style-type: none"> <li>• This is an area which already attracts the outdoor type so developments here would prove very popular. However a top class facility already exists about 30 mins away at Fort William.</li> <li>• There is already a small local demand showing itself in unauthorised construction of jumps etc.</li> <li>• The community council is very active and Glencoe Development Company has recently been formed and are taking forward the 'Glencoe orbital' project - to allow low level, accessible path links around the village and safer access across the main road.</li> <li>• Brecklet forest design plan is close to approval and this is adjacent to an NTS site which already has a number of the facilities which would allow a project of this sort to flourish- Campsite with large turn over, parking, toilet facilities etc.</li> </ul>
8. Arran	<ul style="list-style-type: none"> <li>• Popular island with good transport links</li> </ul>
9. Carron	<ul style="list-style-type: none"> <li>• Community group recently successful in getting £30K for development of mountain bike route.</li> <li>• Pressure for Stirling Mountain Bike club to be developed.</li> <li>• 2.8 Million people within one hours drive</li> <li>• Carron Valley still to reach it's recreation potential</li> </ul>
10. Kelty	<ul style="list-style-type: none"> <li>• Interest from Fyfe Council to develop site.</li> <li>• Has potential to relieve pressure from Glentress</li> </ul>
11. Knapdale	<ul style="list-style-type: none"> <li>• £34K (?) CED Funding in place for feasibility study and trail development.</li> <li>• Pressure and support of Mid Argyll Cycle club</li> </ul>
12. Cairnbaan	<ul style="list-style-type: none"> <li>• As Knapdale</li> </ul>
13. Inverary	<ul style="list-style-type: none"> <li>• As Knapdale</li> </ul>

## **HEADS OF TERMS FOR CLANRANALD MEDIEVAL FORT PROJECT, CARRON VALLEY.**

### **Parties:**

**Landlord** Scottish Ministers c/o Forestry Commission Scotland, 55/57 Moffat Road, Dumfries. DG1 1NP.

**Tenant** Clanranald Trust for Scotland, 27 South Bridge, Edinburgh. EH1 1LL

**1. Subjects** Area of land amounting to 8.4 hectares as shown outlined in red on the attached plan.

**2. Duration** 20 years from date of entry unless terminated as hereinafter provided. There shall be break options in favour of both parties on the anniversary of the date of entry at years 5, 10 and 15, which shall be exercisable at the request of both parties.

**3. Rent** The Tenant shall pay to the Landlord £2,500 for the period of one year from the date of entry, with payment due monthly on the same date as the date of entry, or as otherwise agreed in writing with the Landlord.

From the first anniversary of the date of entry an annual rental of £5,000 shall be payable in advance.

On the fifth anniversary of the date of entry this rent shall be subject to a review which will take into account (but not exclusively so) of the level of receipts. The revised rental shall not be lower than £5000. Interest will be payable at 4% above the base lending rate on any outstanding amounts, until paid.

**4. Use** The Tenant shall occupy the subjects of let for the purposes set out in this clause. The design and location of construction works shall be agreed with the Landlord in advance of any work taking place.

- Construction of a replica Motte and Bailey Fort.
- A base for Clan activities e.g. banquets, weddings, special events, filming etc.
- Creation of an exhibition centre.
- Establishment and management of pedestrian path network around the settlement.

**5. Timber Supply.** The Landlord shall provide larch and spruce timber for the initial fort and palisade fence construction from the area to be felled to accommodate the fort. The Tenant shall repay the cost of harvesting the timber incurred by the Landlord.

## **6. Parking**

The Tenant shall manage the parking area, shaded \_\_\_\_, within the lease area to the satisfaction of the Landlord, and may construct additional parking subject to the agreement with the Landlord regarding location, scale and design. A one way vehicular system shall be operated if required by the Landlord to regulate traffic in the area.

A vehicle barrier shall be provided at the Tenant's cost at points "B1" and "B2".

The pedestrian access path from the parking area to the fort shall be made within the lease area to the west of the existing old dry stone dyke

## **7. Access**

The Tenant shall have a non-exclusive vehicular and pedestrian right of access to, and egress from the subjects of let from the point marked 'A' to the subjects, as shown on the attached plan. The Tenant shall not cause or allow any obstruction or interference any routes along which the Landlord is entitled to take access.

The Landlord does not guarantee access to the subjects at all times and temporary closure may be necessary. The Landlord will be obliged to make every effort to reduce inconvenience to a minimum. The Landlord shall not be liable for any losses incurred howsoever arising, which for the avoidance of doubt includes temporary closure of access.

The Tenant shall have access along the north and west of the lease area as far as the forest barrier marked "C".

## **8. Fencing**

The site shall be fenced if necessary, as agreed between the parties acting reasonably at the cost of Landlord and shall be thereafter maintained by the Tenant.

## **9. Toilet facilities**

The Tenant shall let a contract for the construction of a toilet block (and provide a copy of such contract to the Landlord) to be built at their cost for use by members of the public to a specification and at a location to be agreed with the Landlord prior to commencing construction of any other buildings. The block must be complete prior to opening the fort to the public. On completion the block will be sold for £1, if demanded to the Landlord, who will then immediately lease the block to the Tenant on an FRI lease (£1 if demanded) for the period co-incident with the main lease.

## **10. Security**

The Tenant shall demonstrate to the Landlord that adequate security provisions are in place for the lease area.

## **11. Statutory Consents**

The Tenant shall at its own expense comply with all obligations (whether relating to the subjects of let, any works thereon or thereto, the employment of persons therein, fixtures, machinery, plant or equipment or the business carried on therein or otherwise) imposed by any enactment or regulations made thereunder or lawfully directed or required by any local or other competent authority (including the local planning authority and SEPA) or court of competent jurisdiction, and that whether on the owner or occupier, and at the expense of the Tenant to do and execute or cause to be done or executed all such works, acts, deeds, matters and things which under or by virtue of any statutory enactment or otherwise or shall be

property directed to be done or executed upon or in respect of the premises in respect of the use thereof or otherwise.

**12. Landscaping.** A scheme of landscaping, including shrub planting, shall be agreed with the Landlord.

**13. Landlord's retained rights.**

The Landlord shall retain the management of trees within the lease area. This shall (provisionally) include felling conifer crops in the wetter areas marked "f" and parts of "d", thinning of more stable conifers to improve the in-wood environment for the long term and replanting of felled areas with native species. FCS shall fell trees as necessary at their discretion in advance of work starting on any part of the site. Specifically, The Landlord shall manage the felling for the 2.5 hectare fort site.

**14. Utilities** The routes of all utilities to serve the toilet block shall be agreed with the Landlord. Electricity cables shall be laid underground. (There shall be no electricity supply to the fort site.)

**15. Fire precautions** The Tenant shall not store any oils or flammable materials or light any fires in the premises, except with the written consent of the Landlord.

**16. Signage.** The Tenant shall agree the location and design of all temporary or permanent signage with the Landlord, whose agreement shall not be unreasonably withheld, prior to its erection.

**17. Discharges** The Tenant shall take all necessary precautions to prevent the discharge of polluted or contaminated water, liquid or any other noxious substance into any ditch, drain or watercourse or onto other property within the management or ownership of the Landlord. The burn to the south east of the site and adjacent to the fort earth works must not be damaged.

**19. Outgoings** The Tenant shall be responsible for all rates, taxes and other similar costs relative to their own operations on the site.

**20. Landlord's Title** The Tenant will be responsible for satisfying itself that the Landlord's title is free from any and all restrictions preventing or restricting the granting of these presents.

**21. Nuisance** The Tenant shall not do or permit or suffer to be done in or upon the subjects of let anything which may be or may become a nuisance or annoyance or cause damage or inconvenience to the Landlord or neighbours, and the Tenant shall not deposit upon the said subjects or any adjoining or neighbouring land any rubbish or refuse of any kind.

The Tenant shall maintain the subjects of let, at their own expense, to the satisfaction of the Landlord, in a clean and tidy condition, free of litter.

**22. Liability** The Landlord shall not be liable for any damage or injury suffered by the Tenant or their employees or agents arising out of the activities of the Landlord, or his employees or agents (other than that arising from any negligent, malicious or wilful act).

**23. Damage**

The Tenant shall be responsible for all damage, injury or loss suffered by the Landlord or its staff, employees, agents or contractors, arising out of the exercise of the rights granted under this lease and shall make good all such damage or loss wherever possible to the satisfaction of the Landlord, or in default pay compensation in lieu. Such compensation in the case of growing tree crop will be assessed by the Landlord and will be binding on the Tenant, and in the case of any other damage or loss, will be agreed by both parties, failing which compensation will be assessed independently by an arbiter mutually appointed as hereinafter provided.

**24. Indemnity**

The Tenant hereby indemnifies the Landlord from and against all actions, proceedings, costs, claims, demands and expenses whatsoever by any person whomsoever arising out of or in consequence of the exercise by the Tenant of the rights hereby granted.

**25. Insurance**

The Tenant will be obliged to take out an insurance policy with an insurance company of good repute, at its own expense, effective from the date of entry, covering claims by the Landlord, his officers, employees and by third parties of not less than £5 Million in any one event, which shall not limit the liability of the Tenant. A valid certificate and receipt for premia due shall be exhibited to the Landlord within one week of request.

**26. Inspection**

The Landlord reserves the right to enter the subjects of let subject to providing 24 hours notice for the purpose of inspecting the conduct of the Tenant's operations, and he reserves the right to enter on the site in an emergency for the purpose of fire fighting with no notice.

**27. Artefacts**

In the event that historical or industrial artefacts are discovered by the Tenant on the subjects of let, these shall remain the property of the Landlord and it shall be at the Landlord's sole discretion how these items are dealt with. The Tenant shall be obliged to disclose to the Landlord all those artefacts found within one week of discovery. No metal detection work shall be permitted without the prior written permission of the Landlord, which permission will be granted at the sole discretion of the Landlord.

**28. Removal**

On the termination of the rights hereby granted the Tenant shall remove himself, and all equipment and items thereon without further notice, from the subjects of let. The subjects shall be restored in accordance with the restoration schedule attached. No terminal compensation in respect of Tenant's improvements, equipment or structures will be payable. In the event that litter or any items are left on the subjects of let without the express written consent of the Landlord, the Landlord shall be entitled to undertake removal work and restoration of the site to the reasonable satisfaction of the Landlord and the Tenant shall be liable for meeting the cost incurred in doing so.

**29. Occupation**

The Landlord hereby binds and obliges himself and his successors that the Tenant observing and performing the Tenant's obligations and the conditions herein contained shall and may peaceably and quietly hold, possess and enjoy the subjects and the rights and privileges hereby granted during the said term without any interruption, molestation or disturbance from or by the Landlord or any persons claiming under or in trust for him.

### **30. Notices**

Any Notices to be served in terms hereof by one party on the other shall be sent by registered or recorded delivery post addressed to the party on which such Notice is being served at its registered office or usual or last known place of abode or business in the United Kingdom. Any Notice posted in accordance with this clause will be deemed to have been served at the expiry of forty eight hours after the time of posting.

### **31 Expenses**

The Landlord and Tenant shall be responsible for their own legal and administrative expenses in connection with the preparation of this Minute of Lease and any revisions, extensions or opinions thereon, and the Tenant shall pay Stamp Duty Land Tax (if any) thereon.


### **32. Irritancy**

If there shall be any breach, non-observance or non-performance of any of the obligations on the part of the Tenant herein contained which shall not be remedied by the Tenant within such reasonable period as shall be allowed by the Landlord in a Notice requesting the remedy of such breach or if the Tenant shall become bankrupt or enter into liquidation (whether compulsory or amalgamation only) then and in such case it shall be lawful for the Landlord to bring this lease to an end forthwith and to repossess the subjects as if this lease had not been granted but without prejudice to any right of action or remedy of the Landlord for any previous breach of any of the obligations of the Tenant under this lease.

### **33. Arbitration**

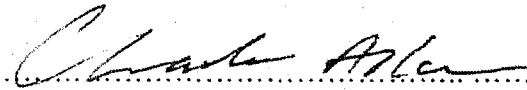
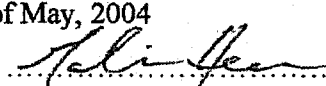
In the event that a dispute or differences arise out of or in connection with this lease so far as the dispute is not a question of law or in particular any dispute as to the sums due to the Landlord, the same shall, failing agreement, be referred to an arbiter to be mutually chosen by the Parties, or failing agreement, by the Chairman for the time being, of the Royal Institution of Chartered Surveyors in Scotland, which arbiter shall act in accordance with the provisions of the Arbitration (Scotland) Act 1984 or any statute modification or re-enactment thereof and the finding of the said arbiter shall be final and binding on the parties hereto; and the decrees and awards of such arbiter shall be final and binding on the parties who agree to exclude the jurisdiction of the courts in terms of Section 3 of the Administration of Justice (Scotland) Act 1972 or any amendment, extension or re-enactment thereof.

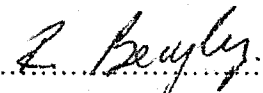
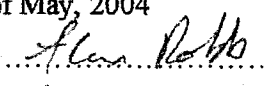
Subscribed for and behalf of The Scottish Ministers.

  
..... (Laurie Tyson, Land Agent (Scotland))  
on <sup>JUNE</sup> 15<sup>th</sup> day of ~~May~~ Two Thousand and Four  
before Stuart Moscrop witness  
Name Stuart Moscrop  
Address FOREST ENTERPRISE  
55 MOFFAT ROAD, DUMFRIES, DG1 1NP  
Occupation: CIVIL SERVANT

We, Charles Allan and Rubina Beagley being two Trustees of the Clanranald Trust for Scotland of 27 South Bridge, Edinburgh, EH1 1LL hereby acknowledge receipt of the foregoing Heads Of Terms pursuant to entering into the lease of land to which these Heads of Terms refer. We confirm that we understand and accept the foregoing terms and by our subscription hereof, hold ourselves legally bound by these presents.

Signed on behalf of Clanranald Trust for Scotland.

  
..... (Charles Allan)  
on 6<sup>th</sup> day of May, 2004  
before  (witness)  
name MALIN HEEN  
address 28 HAWKHILL RD  
KINCARDINE  
CLACKS FK10 4QT  
Occupation EVENTS MANAGER

  
..... (Rubina Beagley)  
on 6<sup>th</sup> day of May, 2004  
before  (witness)  
name ALAN ROBB  
address 10 WELLSGREEN  
POLOKSHAWS  
GLASGOW G43 1RR  
Occupation MOSAIC ARTIST



## FORESTRY COMMISSION SCOTLAND

### RESTORATION SPECIFICATION FOLLOWING FOREST SOILS DISTURBANCE

V Res Sch (Simple) 16304

#### 1. RESTORATION SOIL DEPTH

- i) A surface layer of topsoil, suitable subsoil and/or soil forming material not less than 1m deep is required on restoration, and shall be deposited and mixed as agreed with the Landlord.
- ii) In the event of a shortage of topsoil or suitable subsoil for restoration, then soil forming material available from excavations elsewhere on the site, or if necessary from adjacent land, shall be considered. Suitable soil forming materials shall consist of friable and free draining materials with a low stone content, and have a chemical composition that does not inhibit tree growth.
- iii) All provisions in this Schedule relating to the composition and depth of restored soil profiles will remain in force unless the Tenant can prove to the reasonable satisfaction of The Landlord that there are insufficient surplus soil or soil forming materials elsewhere on the whole working site or available from adjacent land. Nevertheless, the Tenant will remain obliged to meet the requirements of this Schedule as far as possible.

#### 2. SOIL STRIPPING

- i) Apart from tree harvesting and removal of stumps and forest residue (using low ground pressure machinery, running on 'brash mats', in dry conditions), and essential drainage works, no machinery shall be used on any part of the site, except as specifically agreed with the Landlord, until topsoil and subsoil have been stripped.
- ii) Stumps on excavation areas shall be dug out e.g. by excavator and not dozed. Soil should be recovered from stumps wherever possible.
- iii) Other tree felling residue should be removed during or after the stump removal operation in a similar manner. These operations should not result in significant ground damage (soil rutting and mixing) below the brash mats but if this occurs it is an indication that conditions are too wet.
- iv) The stumps, roots and other forest residue shall be disposed of as agreed by the Landlord.
- v) All topsoil, suitable subsoil and soil forming material shall be stripped to the full available depths as separate operations.
- vi) In order to minimise compaction of soils, only those vehicles involved in harvesting trees, removing stumps / residues and loading soils shall be permitted on unstripped areas, and then only restricted to the minimum necessary. At no time during the loading of the topsoil and sub-soil layers should any machine other than a tracked 360 degree excavator

CARRON - FORT SITE















L9/3/53

BM 223.58m

216m

212m

224m

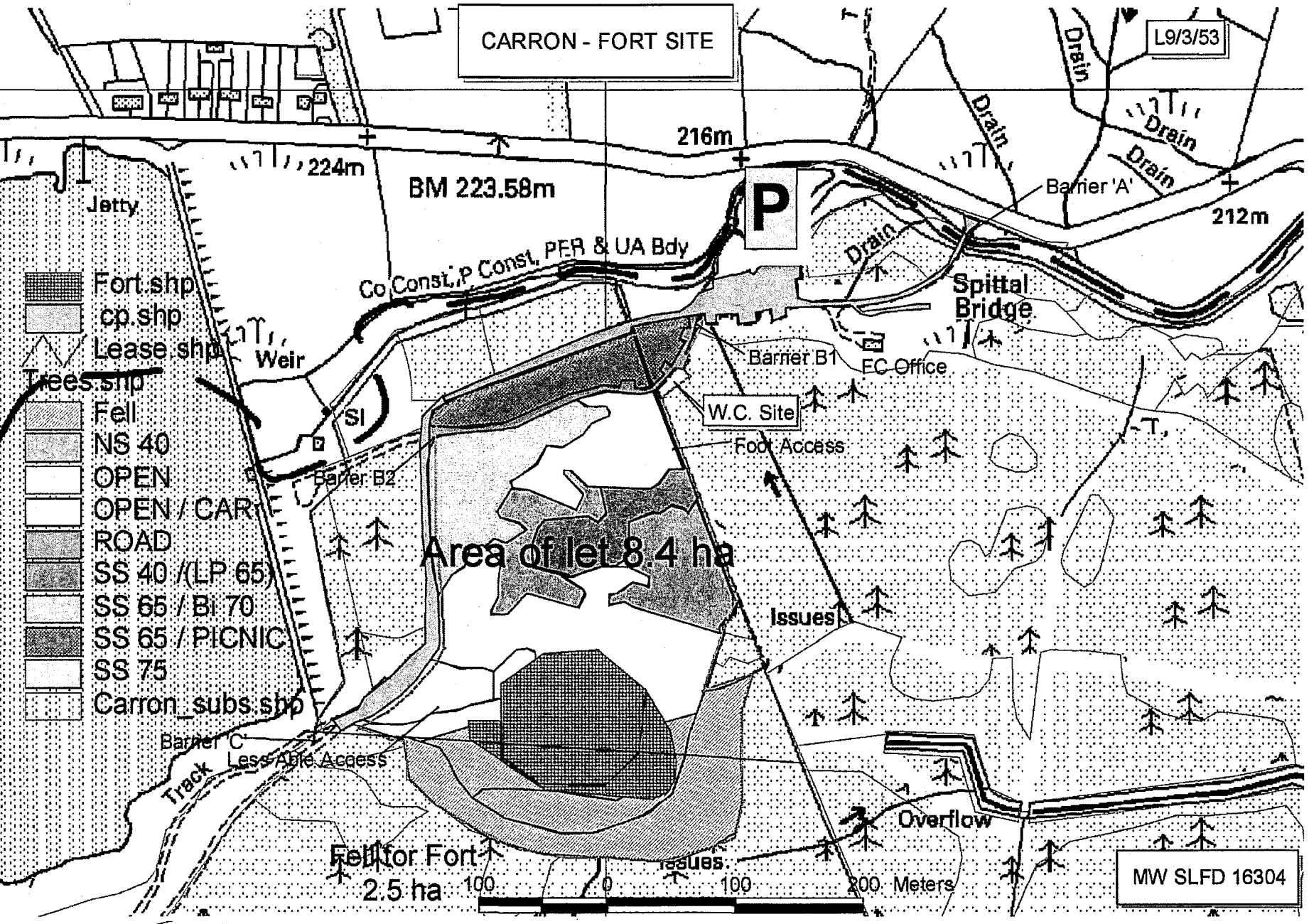
-  Fort.shp
-  cp.shp
-  Lease.shp
-  Trees.shp
-  Fell
-  NS 40
-  OPEN
-  OPEN / CAR
-  ROAD
-  SS 40 / (LP 65)
-  SS 65 / B1 70
-  SS 65 / PICNIC
-  SS 75
-  Carron\_subs.shp

Area of let 8.4 ha

Fell for Fort  
2.5 ha

100 200 Meters

MW SLFD 16304



*Handwritten signatures and initials:*

CR  
 CR  
 CR  
 R. Beatty  
 CR

travel on either layer. If possible the excavator should not run on either soil layer following de-stumping. Vehicles used in transporting soils shall only travel over areas of ground that have previously been stripped of topsoil, subsoil and shallow soil forming material.

- vii) Peat may be windrowed by low ground pressure dozer for loading by excavator providing that the Landlord is satisfied that excessive damage will not be or is not being caused to soil structure.
- viii) The surface layer, 1 m thick, of any peat deposits shall be regarded and therefore treated as topsoil. Deeper deposits of peat shall be regarded and therefore treated as sub-soil or soil forming material as agreed with the Landlord.
- ix) Topsoil, subsoil and soil forming materials shall only be worked between 1<sup>st</sup> April and 15th September, unless otherwise agreed with the Landlord, when soil moisture is below Field Capacity and only after 5 days of reasonably dry weather. If heavy rain or continuous persistent rain occurs during operations, work must stop until a subsequent period of 5 days of reasonably dry weather has elapsed, unless otherwise agreed with the Landlord.
- x) Seven (7) days' notice is to be given to the Landlord prior to the commencement of soil working, unless otherwise agreed with the Landlord.
- xi) Areas of haulage roads, hard-standings, office and workshop accommodation, subsoil / overburden storage dumps, lagoon and bund sites, drainage channels and areas likely to be disturbed by any subsequent operations shall be stripped.
- xii) Topsoil of differing qualities that warrant separate storage shall be stripped, and stored separately unless otherwise agreed with The Landlord.

### 3. SOIL STORAGE

- i) Topsoil, subsoil and soil forming material shall be stored in separate storage mounds which do not overlap unless otherwise agreed with the Landlord in writing in advance. Peat will be stored in banded lagoons as necessary. Peat should be stored in such a way as to minimise depth, water-logging, erosion and run-off into any watercourse. Impounding banks shall be sufficient to ensure stability and retention.
- ii) Soil storage mounds shall be as shallow as possible given the space available for storage. The maximum height of soils storage mounds shall, unless otherwise agreed by the Landlord, be as follows:
 

a.	Topsoil / Peat	5m
b.	Subsoil	6m
c.	Soil forming material	10m.
- iii) Prior to placing subsoil and soil forming material into storage mounds, the site of the mound shall first be stripped of topsoil which shall be incorporated in the topsoil mound.

- iv) Soils shall be placed into store with the minimum of compaction and with the least number of vehicle passes as is necessary to ensure stability. The only vehicle permitted on the soils during and after storage shall be a low ground pressure tracklaying machine. Dozers may only be used for grading the surface of the mound and must not be used to push soils into position i.e. mounds will be created by back tipping or excavator. If dumpers are used in such a manner that they travel over any part of the mound during its formation, an armouring of stone will be used as required by the Landlord.
- v) As soon as any individual storage mound is formed, the surface of the soils shall be lightly graded so as to restrict the ingress of rainwater into the stored soils. The ingress of surface water and/or ground water into the soil storage mounds shall be restricted by the provision of drainage cut-off ditches excavated upslope of the mound.
- vi) All soil mounds shall be seeded using deep rooting species of grasses during the next season following their construction, and fertilised as necessary to ensure that an even established sward develops. Thereafter the sward shall be maintained until the soils are required for the restoration of the site. Weeds shall be controlled by cutting or spraying with approved weed killers.
- vii) No topsoil, subsoil or soil forming materials shall be removed from the Site other than that required to be re-spread in the restoration of the Site.
- viii) Soils shall be protected at all times from contamination by, inter alia, oils greases or other lubricants, fuel oil or overburden.

#### **4. RESTORATION PLAN**

- i) As a general principle restoration shall be in accordance with the Landlord's Forest Design Plan if available unless varied with the agreement of the Landlord, or at the reasonable request of the Landlord.
- ii) Within 6 months of commencement of restoration works, or earlier if required by the Landlord, a detailed Restoration Plan shall be prepared showing the following information in so far as can be foreseen, together with a written statement and/or specification where such detail is not shown on the restoration plan. The Restoration Plan shall include relevant details such as:
  - a. The final contours (at 2m intervals) to be achieved which must generally give positive gradients of between 3% and 15% except where pre excavation gradients of the hillside exceed 15%, in which circumstances the pre excavation gradients may be recreated on restoration.
  - b. Positions and dimensions or any road or track to be retained or constructed.
  - c. Position, dimensions and gradients of any ditches or watercourses to be provided or retained, together with details of gradient and any armouring.

- d. Position and details of any water features to be retained or created.
- e. The position and details of any drainage or peat retaining / drainage berms together with details of the intended longitudinal gradient of such berms.
- f. The position, gradient and details of any culverts, spillways or other permanent drainage features to be provided.
- g. The positions and details of all fences, gates and cattle grids to be retained or provided.
- h. The position and volume of all soils storage mounds.
- i. The proposed distribution of available soils in terms of location, area, depth and proportions, and details of spreading and (as appropriate) mixing into the upper 1 m final restoration layer.
- j. Proposed use of soil amendments, if any, required to make up any shortfall in quantity or deficiency in physical or nutrient characteristics in the upper 1 m restoration layer so that it is suitable for healthy tree growth.
- k. The proposed specifications for grass or other ground cover to be sown following restoration of the surface.
- l. The areas to be planted to trees, unless to be carried out by the Landlord, together with the areas to be sown to grass or other ground cover.
- m. The Restoration Plan shall be submitted to the Landlord for their approval or, at the Landlord's discretion, their amendment within 2 months. The approved plan shall be implemented unless varied with the agreement of the Landlord.
- n. If soil amendments are to be used, prior to soils replacement, a Soils Amendment Plan shall be prepared for the specification and monitoring of all soil forming operations involving amendments. The Plan shall include *inter alia* the testing as appropriate of samples of materials imported or to be imported onto the Site and having regard to the properties of same, the testing of soil or soil forming materials present on the subjects. The Plan will include the specification of quantity, and proportion and depth of mixing, the specification of soil mixing method, the monitoring of operations in such a manner and frequency as is necessary to ensure compliance with the Restoration Schedule in general and Section 7 in particular.
- o. The Soils Amendment Plan shall be submitted to the Landlord for their approval and shall periodically be amended, at the instigation of the Tenant or the Landlord, as may be necessary having regard to changes in restoration materials or other factors. The approved plan and any amendments shall be implemented unless varied with the agreement of the Landlord.

## 5. RESTORATION

- i) Site Clearance - On completion of restoration, all plant, machinery, buildings, fixed equipment, concrete structures, areas of hardstanding including sites compounds, and access and haul roads shall be removed unless otherwise agreed by the Landlord.
- ii) Settlement Ponds - All settlement ponds, bunds and lagoons shall, unless to be retained in accordance with the approved plans, be emptied of water and slurry, any impounding banks breached, and the voids filled with dry inert material to approved levels.
- iii) Treatment of Overburden -
  - a. The overburden shall be levelled and graded in accordance with the approved final restoration contours so that the restored site conforms with the plan finally agreed in accordance with the Restoration Plan, and shall be free from risk of ponding or erosion and be free from hollows, mounds or other obstructions to the extraction of timber by conventional forwarder.
  - b. Except in the case of a shortfall in soil / soil forming material and unless deemed unnecessary by the Landlord, following satisfactory spreading the overburden shall be ripped downslope to a minimum depth of 600 mm using winged tines or ploughs spaced at no more than 2m centres before any material is spread over its surface. Alternatively, the top 600 mm of the overburden may be thoroughly cultivated by excavator.
  - c. In the case of a shortfall of stored soil / soil forming material a sufficient depth of overburden shall be cultivated by excavator so that the final depth of cultivated material and soil / soil forming material shall be at least 1 m.
  - d. All stones and other impediments exceeding 300 mm in any one direction and other deleterious material exposed by the tipping or cultivation operations shall be removed, and buried so as to be a minimum of 1m below the overburden restoration level.
  - e. Following cultivation of the overburden or soils / soil forming materials, steps shall be taken to ensure that recompaction does not occur as a result of any subsequent restoration operations. If compaction does occur for whatever reason, then the areas so affected shall be decompacted to a depth of 1 m.
  - f. The approval in writing of the Landlord as to the satisfactory completion of the works listed above in respect of the overburden, shall be obtained before any soils / soil forming materials are respread or cultivated, unless the cultivation of the overburden forms part of the Restoration Plan.
  - g. Earth moving machinery shall travel between the soil mounds and the soil spreading sites along clearly defined routes on the overburden surface and these routes shall be cultivated, decompacted and destoned prior to being covered with soils.

h. **Forest Roads** – Forest roads and tracks that are severed or excavated shall be constructed or reconstructed to a standard approved by the Landlord [*attached / not attached*]. Roads or tracks shall be constructed in the original position or, at the discretion of The Landlord, in such other position as is beneficial to the future management of the area, to a total length equal to that existing on the site at commencement of operations, without prejudice to the provisions of the Lease.

iii) **Drainage**

- a. Drainage shall be such as to prevent erosion, ponding, flooding, waterlogging, silting and pollution of the site and adjoining land, and be so arranged as to ensure the stability of the restored site. This will generally entail main catchment drains and sufficient local percolation drains.
- b. Watercourses of suitable longitudinal section, cross section and bed material shall be provided for the efficient dispersal of surface and groundwater from the site. Suitable silt traps shall be provided where necessary which shall be accessible to wheeled vehicles for cleaning purposes. Water courses which may be subject to erosion shall be armoured with durable rock. The use of steel pipes, gabion channels, and concrete lined channels on water courses shall only be permitted by prior approval of The Landlord.
- c. The bank slopes of channels shall be no steeper than 45% (1:1) unless otherwise agreed by The Landlord.
- d. Watercourses shall be culverted under roads by the shortest practicable route.
- e. The catchments of watercourses where they leave the site shall remain approximately the same size after restoration as before working, except where agreed otherwise with The Landlord, in consultation with the Local Planning Authority if different.
- f. The normal forms of outlet from ponds shall be a stone lined spillway.
- g. Contour berms shall be used wherever the slope exceeds 10% (1:10). Berms will be spaced at a maximum of 20 m vertical intervals, constructed from suitable overburden material 4 m wide, sloping inwards at a gradient of 8%. The longitudinal gradient of berms shall be between 1 % and 3%, depending on the nature of the restoration materials. Care shall be taken to ensure that there is no slackening of gradient on any berms, which may lead to silting occurring. The cut and fill slopes associated with the formation of the berms shall have a maximum gradient of 50%. Areas predominantly of peat will be provided with additional intermediate stabilising berms as agreed with The Landlord.
- h. All drainage facilities provided shall be maintained in efficient order during the period of occupation of the site, including the aftercare period.
- i. Water bodies, permanent water courses, moss peats and wetlands shall be restored or created in accordance with the restoration plan agreed with The Landlord. All such features shall be constructed using best available techniques and to a standard which will ensure existence in the long term.

vi) Soil Replacement

- a. All roads, tracks and contour berms shall, wherever practicable, be constructed prior to any soils replacement commencing. Where possible, these features should be incorporated into the routes for transporting soils from the dump to the respreading sites.
- b. Topsoil, subsoil and soil forming materials shall only be removed from the storage mound and respread when the ground and the soils are below Field Capacity and only after 5 days of reasonably dry weather. If heavy rain or continuous persistent rain occurs during operations, work must stop until a subsequent period of 5 days of reasonably dry weather has elapsed, unless otherwise agreed with The Landlord. In the case of incorporation of amendments, mixing shall only take place when the ground and the soils are below Field Capacity. If heavy rain or continuous persistent rain occurs during operations, work must stop, unless otherwise agreed with The Landlord.
- c. Soil forming material, subsoil and topsoil shall be respread in ascending order in separate layers or, at the discretion of The Landlord and, in accordance with the Restoration Plan referred to in Section 4, in one or more mixed layers, to a depth of at least 1 m. Each layer shall be placed without compaction of the underlying layer. If for whatsoever reason, compaction does occur, then such area shall be decompacted by cultivating the full depth of the layer plus 150 mm into the underlying layer up to a maximum of 1 m, using a winged tine cultivator or totally cultivated by excavator.
- d. All soil replacement operations shall be by way of truck and shovel whereby the only equipment permitted on the soil storage mound is a 360 degree track laying excavator and movement of this machine on the mound shall be limited to that which is essential to the soil loading operations. Vehicles to be used in transporting and discharging soils during restoration shall only be those that discharge their load at the rear extremity of the vehicle. **All respreading shall be by the Loose Tipping technique whereby tipped soils are not trafficked during the respreading operation.** Vehicles transporting soil shall only travel along defined routes on the surface of the overburden. Any compaction of the overburden by such traffic shall be relieved prior to covering with soils by subsoiling to a depth of 300 mm using winged tine subsoilers or totally cultivated by excavator.
- e. The spreading of the soils on the restoration surface shall be carried out by a 360 degree tracklaying excavator, which shall not travel on the soils being placed.
- f. All available soils shall be respread as a uniform layer over the whole of the area disturbed by the operations in accordance with the Restoration Plan referred to in Section 4 and the Forest Design Plan if applicable.
- g. In the case of areas of forestry where peat is available and unless otherwise specified in the Restoration Plan referred to in Section 4 and the Forest Design Plan, peat should be used in a 50 % intimate mix with best available mineral soil or soil forming material. Fibrous peat will be preferred over amorphous peat. [Best soil is defined as best for tree growth in terms of nutrients and granular nature].

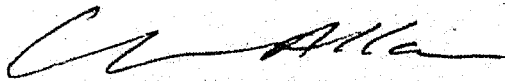


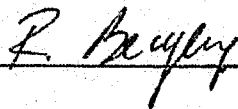
Surveys shall be required until the Landlord is satisfied that the relevant standards have been achieved.

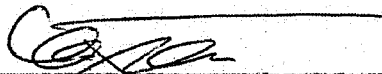
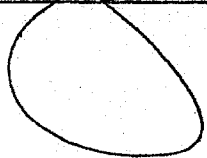
**6. FENCING**

Stockproof fencing and appropriate gates, stiles and cattlegrids shall be provided, erected and maintained around the entire periphery of the site until the development, the restoration, and the aftercare (if appropriate) stages have been completed, unless otherwise agreed by The Landlord. Guidance on fencing is given in the publication Forestry Commission Bulletin 102 - "Forest Fencing" obtainable from HMSO.

Forestry Commission Scotland  
Scottish Lowlands Forest District  
16<sup>th</sup> March 2004

  
\_\_\_\_\_ CBT

  
\_\_\_\_\_ CBT

  
\_\_\_\_\_ LT  


- h. In the case of areas of agriculture, if peat is used it should only be as < 30 % intimate mix with best available mineral soil forming material in the top 1 m of soil.
- i. Except by agreement of the Landlord, the top 1 m of soil will be treated with lime or other suitable substance to raise pH, in the case of areas of forestry to at least 4.0, and in the case of areas of agriculture to at least 5.5. This condition shall not apply to areas of pure peat.
- j. In the case of areas of forestry, except by agreement of The Landlord, the top 1 m of soil will be treated with fertilisers as necessary to raise levels of major nutrients (except Nitrogen, which is highly mobile) to threshold levels for healthy tree growth for at least 10 years.
- k. The minimum standards for soil and soil forming material used in restoration to forestry shall be:
- Bulk density < 1.5 g/cm<sup>3</sup> to at least 0.5 m depth and <1.7 g/cm<sup>3</sup> to 1 m depth.
  - Stoniness < 40% by volume; few stones greater than 100 mm in size.
  - pH 3.5 to 7.5 (exceptionally 8.0).
  - Electrical conductivity <2000 µS/cm (1:1 soil water suspension).
  - Iron pyrite content < 0.5%.
  - Heavy Metal content not excessively over the ICRCL (Interdepartmental Committee on the Redevelopment of Contaminated land) thresh-hold concentrations.
  - Organic contaminants not excessively over the ICRCL action trigger concentrations.
- l. In the case of areas of agriculture, all stones over 100 mm in size shall be removed from the upper 30 cm of soil and the soil cultivated shall be thoroughly cultivated, treated with lime and fertiliser and a grass ley or other ground cover established and maintained all to the reasonable satisfaction of the Landlord.
- m. In the case of areas of forestry a grass ley or other ground cover established and maintained all to the reasonable satisfaction of the Landlord. Such ground cover will be maintained as necessary to remove noxious weeds.
- n. The top 1 m of soil shall be devoid of any woody matter of greater than 30 cm in any direction.
- o. Prior to completion of restoration at a frequency of no less than once per annum and within 3 months following completion of restoration a Soils Survey shall be carried out to establish the nature, extent and characteristics (including levels of toxic substances, salinity, organic matter content, pH, soil texture and available N, P, K & Mg levels) of topsoil and subsoil. The specification of the said soil survey and the organisation that will carry it out will be agreed in advance by the Landlord. The Soil Survey relating to any area shall be required only once, unless remedial works are necessary to bring the restored soil profile up to the standard required by this Restoration Schedule, in which case repeat Soil