Scottish Lowlands Forest District

Campsie Glen (Balcorrach Wood Amendment)

Land Management Plan

Approval date: ***

Plan Reference No: ****

Plan Approval Date: ****

Plan Expiry Date: *****

We manage Scotland's National Forest Estate to the United Kingdom Woodland Assurance Standard – the standard endorsed in the UK by the international Forest Stewardship Council® and the Programme for the Endorsement of Forest Certification. We are independently audited.

Our land management plans bring together key information, enable us to evaluate options and plan responsibly for the future. We welcome comments on these plans at any time.



The mark of responsible forestry



CSM 6 Appendix 1b

FOREST ENTERPRISE - Application for Land Management Plan Approvals in Scotland

Forest Enterprise - Property

Forest District:	Scottish Lowlands
Woodland or property name:	Campsie Glen (Balcorrach Wood)
Nearest town, village or locality:	Lennoxtown
OS Grid reference:	NS 619 789
Local Authority district/unitary Authority:	East Dunbartonshire Council

Areas for approval

2

	Conifer	Broadleaf
Clear felling	n/a	n/a
Selective felling	n/a	n/a
Restocking	n/a	n/a
New planting (complete appendix 4)	18.8 Ha	49.2 Ha

- 1. I apply for Land Management Plan approval*/amendment approval* for the property described above and in the enclosed Land Management Plan.
- 2. * I apply for an opinion under the terms of the Environmental Impact Assessment (Forestry) (Scotland) Regulations 1999 for afforestation* /deforestation*/ roads*/ quarries* as detailed in my application.
- 3. I confirm that the initial scoping of the plan was carried out with FC staff on 09/11/2015
- 4. I confirm that the proposals contained in this plan comply with the UK Forestry Standard.
- 5. I confirm that the scoping, carried out and documented in the Consultation Record attached, incorporated those stakeholders which the FC agreed must be included.
- 6. I confirm that consultation and scoping has been carried out with all relevant stakeholders over the content of the design plan. Consideration of all issues raised by stakeholders has been included in the process of plan preparation and the outcome recorded on the attached consultation record. I confirm that we have informed all stakeholders about the extent to which we have been able to address their concerns and, where it has not been possible to fully address their concerns we have reminded them of the opportunity to make further comment during the public consultation process.

7. I undertak	ce to obtain any permission(s) ne	ecessary for the implementation of the approved Plar
Signed	Forest District Manager	. SignedConservator
District	Scottish Lowlands	ConservancyCentral
Date		Date of Approval
*delete as ap	propriate	Date approval ends

CSM 6 Appendix 4

FOREST ENTERPRISE - Application for Approval of Woodland Creation

1. Forest Enterprise – Property

Forest District:	Scottish Lowlands Forest District
Woodland or property name:	Campsie Glen (Balcorrach Wood)
Nearest town, village or locality:	Lennoxtown
OS Grid reference:	NS 619 790
Local Authority district/unitary Authority:	East Dunbartonshire Council

2. Proposed areas to nearest tenth of a hectare

New Planting	68.0
Natural Colonisation	
Open Ground	45.0
Total	113.0

3. Special areas and protected land

Designation	Area Name or Number	Comments
Local Landscape Area (proposed)	Campsie Fells Local Landscape Area	(see Sections 3.3 & 5.1.4 & Appendix VII Landscape and Visual Impact Assessment, Map 3c – Landform Features & Map 3d - Key Landscape Considerations)
Local Landscape Area	Glazert Valley Special (Local) Landscape Area	"

4. Proposal details of woodland creation

Area Name or number	Gross Area (Ha)	P Year	Spp	Area (Ha)	Open Ground (Ha)	Comments
Lowland mixed deciduous woodland						
1a	25.2	2019/20	SBI 35% CAR 35% POK 15% ASP 15%			(see Section 5.1)
1b	1.6	2019/20	ROK			u
1c	1.6	2019/20	WCH			u
1d	1.1	2019/20	CAR 40% GWL 30% ROW 30%			и

1e	6.3	2019/20	SOK 80%	и
16	0.5	2019/20	POK 20%	
1f	4.5	2019/20	SYC	u
1g	2.0	2019/20	CAR	и
1h	1.2	2019/20	SBI 80%	ű
		2010/20	POK 20%	
Total	43.5			
Conifer				
2a	5.6	2019/20	DF	(see Section 5.1)
2b	11.3	2019/20	NS	и
Total	16.9			
Policy				
3	6.2	2019/20	MB 70%	(see Section 5.1)
			MC 30%	
Total	6.2			
Low growing shrub				
4a	0.7	2019/20	HAW 40%	(see Section 5.1)
			PSP 30%	
41		0040/00	GRS 30%	"
4b	0.1	2019/20	HAZ 50%	"
4-	0.2	2019/20	ELD 50% ROW 40%	и
4c	0.2	2019/20	ELD 30%	
			HAW 30%	
4d	0.1	2019/20	ROW 25%	ii
Hu	0.1	2010/20	HAZ 25%	
			WEM 25%	
			ELD 25%	
4e	0.1	2019/20	HAZ 50%	u
			WEM 50%	
Total	1.2			
Native wet woodland				
5	0.2	2019/20	GWL	(see Section 5.1)
Total	0.2			

Environmental Impact Assessment Determination Enquiry Form

Complete this form to find out if you need consent, from the Forestry Commission (under the EIA Regulations 1999), to carry out your proposed work.

Section 1 Proposed work								
Please put a cross in the box to indicate the type of work you are proposing to carry out.								
Give the area	in hecta	res and whe	re appropi	riate the percei	ntage of conife	ers and		
broadleaves.								
Proposed	oroco	Area in	%	%	Proposed	oroco	Area	
work	cross	hectares	Conifer	broadleaves	work	cross	in ha	
Afforestation	X 68.0	68.0	28	72	Forest	Х	0.6	
Anorestation	^	00.0 20	20		roads		0.6	
Deferentation					Forest			
Delorestation	Deforestation quarry quarry							
Location and F	Balcorrach Wood, Lennoxtown, East							
Location and District			Dunbartonshire – Scottish Lowlands Forest District					

Please attach map(s) showing the boundary of the proposed work and also give details of the operations.

Section 2 Property details			
Property Name	Balcorrach Wood		
Grid Reference (e.g. AB 123/789	NS 619 790		
Local Authority	East Dunbartonshire		
Nearest Town	Lennoxtown		

Section 3 Applicant's category (please put a cross in one box)						
PE	Personal occupier		PU	Public ownership	Х	
BU	Business occupier		ОТ	Other		
VO	Voluntary organisation		СТ	Crofting tenant		

Section 4 Applicant's type (please put a cross in one box)						
LS Lessee OW Owner X						
TE Tenant TR Trust						

Section 5 your agent or woodland manager's details									
Title	Mr	Initials	R		S	Surname)	Clamp	
Organisation	Forestry Commission Scotland – Scottish Lowlands Forest District								
Address	Five Sisters House								
Five Sisters B	usiness F	Park							
West Calder				Post	СО	de	EH55	8PN	
Tel No	0300 067 6725 Mobile 07801 213 304								
Fax	- e-mail robert.clamp@forestry.gsi.gov.uk								
Is this the add	Is this the address for correspondence?					Х		No	

Section 6 Applicant's details									
Title	Mr	Initials	S		Surname		Towers		
Organisation	Forestry	Forestry Commission Scotland – Scottish Lowlands Forest District							
Address	Five Sisters House								
Five Sisters B	usiness F	Park							
West Calder				Post	СО	de	EH55	8PN	
Tel No	0300 067 6765 Mobile 07867 353 108								
Fax	-			e-mail stewart.towers@forestry.gsi.gov.u					orestry.gsi.gov.uk
Is this the address for correspondence?			yes		Х		No		

Section 7 Sensitive Areas: Give the area of the proposal that is covered by any of the				
following designations	1			
Sensitive Area as listed in "Schedule 2" of the 1999 EIA Regulations Area				
(ha)				
a. Sites of Special Scientific Interest (SSSI) or Proposed Sites of Special				
Scientific Interest (PSSSI)				
b. SSSI's with a Nature Conservation Order (Section 29 of the Wildlife				
and Countryside Act 1981)				
c. National Park (NP)	N/A			

Environmental Impact Assessment Determination Enquiry Form

d. The Broads	N/A
e. World Heritage Site	N/A
f. Scheduled Ancient Monument (SAM)	N/A
g. an area designated as National Scenic Area	N/A
h. Area of Outstanding Natural Beauty (AONB)	N/A
i. "Natura 2000" site - (European network of special areas of conservation and special protection areas under the Wild Birds Directive)	N/A

Contents

Summary of Proposals	11
1.0 Introduction:	12
1.1 Setting and context	12
1.2 History of the site	12
2.0 Analysis of previous plan	12
3.0 Background information	13
3.1 Physical site factors	13
3.1.1 Geology Soils and landform	13
3.1.2 Climate	13
3.1.3 Exposure (DAMS)	13
3.1.4 Hydrology	14
3.2 The existing site	14
3.2.1 Existing tree/shrub cover	14
3.2.2 Access	15
3.2.3 LISS potential	15
3.2.4 Potential markets	15
3.2.5 Pathogens	15
3.3 Landscape and land use	16
3.3.1 Landscape character and value	16
3.3.2 Visibility	20
3.3.3 Neighbouring land use	21
3.4 Biodiversity	21
3.4.1 Priority Habitat Types & Important Species	21
3.4.2 Invasive Non-Native Species	21
3.5 Heritage	22
3.6 Community & Recreation	22
3.6.1 Community	22
3.6.2 Recreation	23
4.0 Analysis and Concept	23
5.0 Management Plan Proposals	28
5.1 Woodland Creation	28
5.1.1 Planting prescriptions	
5.1.1.1 Lowland mixed deciduous woodland	
5.1.1.2 Conifer	
5.1.1.3 Estate 'Policy' Woodland	
5.1.1.4 Low growing woody shrub	
5.1.1.5 Native wet woodland	
5.1.2 Ground preparation	30
5.1.3 Protection from browsing	31
5.1.4 Landscape	31

5.2 Woodland Management	
5.2.1 Lowland Mixed Deciduous Woodland	31
5.2.2 Conifers	32
5.2.3 Estate 'Policy' Woodland	33
5.2.4 Native Wet Woodland	33
5.2.5 Low growing shrubs	33
5.2.6 Open Land	34
5.2.7 Hydrology	34
5.2.8 Hole Farm – Section 75 Recreational Woodland	35
5.3 Biodiversity	35
5.3.1 Priority Habitat Types	35
5.3.2 Important Species	35
5.3.3 Invasive Non-Native Species	35
5.3.4 Deadwood	36
5.3.5 Wildlife Management	36
5.4 Heritage	36
5.5 Community & Recreation	37
5.5.1 Community	37
5.5.2 Recreation	37
5.6 Access	38
5.6.1 Visitor	38
5.6.2 Management	38
5.7 Critical Success Factors.	38

Appendices:

Appendix I: Consultation Record

Appendix II: General Management & Potential Projects Table

Appendix III: Tolerance Table

Appendix IV: Management Plan Brief

Appendix V: Objective Appraisal, Monitoring & Evaluation

Appendix VI: Maps

Appendix VII: Landscape and Visual Impact Analysis Report

Appendix VIII: Hole Farm - Section 75 Recreational Woodland Management Plan

Appendix IX: Related Documents

Version History

	3	
Version	Date	Comments
1.0	15/08/2016	Initial draft
1.1	16/08/2016	Update to Sections 3.1.4, 3.4.1 & Appendix II
1.2	22/09/2016	Update to Sections 3.4.1, 5.1.2 & 5.5.1
1.3	06/10/2016	Amend CSM6 1b
1.4	30/01/2017	Amend Section 5.1.1

Summary of Proposals

This land management plan amendment sets out a series of proposals to be undertaken or explored by Scottish Lowlands Forest District in order to achieve the objectives set out within the management brief for the proposed Balcorrach Wood.

This plan will create a predominantly mixed broadleaved, new woodland in keeping with the surrounding landscape which will enhance the biodiversity potential of the site whilst retaining features such as hedgerows, dykes and important views particularly towards Campsie Glen and the Fells. This plan also sets out a vision for the site as an amenity asset for the surrounding communities enhancing existing connectivity between communities and promoting increased educational and recreational use of the site.

1.0 Introduction:

1.1 Setting and context

The proposed Balcorrach Wood site is currently agricultural land used for grazing situated between the town of Lennoxtown and the village of Clachan of Campsie in the Local Authority of East Dunbartonshire (OS Grid Ref: NS 619 790). Lying between 70m and 158m above sea level the site covers an area of approximately 113 Hectares and lies on the south facing foothills of the Campsie Fells below the B822 Crow Road; an area identified within the Central Scotland Forestry Strategy as desirable for woodland expansion particularly to develop access links within enhanced landscape corridors. The site also lies to the south-east of a larger FES managed site, Campsie Glen covered by the Land Management Plan (formerly Forest Design Plan - FC File Ref: 032/09/02) approved on 5th May 2010. It is the intention for this document and its associated maps and appendices to serve as an amendment to that plan to include Balcorrach Wood (see **Map 1 – Location** and **Map 2 – Context**).

Table 1 Current land usage

Land use	Area (ha)	%age
Agriculture (grazing)	113	100
Total	113	100%

1.2 History of the site

The site's main land use over the last several hundred years has been as agricultural land for grazing incorporating some hedgerow planting and drystane dykes to delineate field boundaries and provide the stock contained within some cover from the elements. There has not been a history of woodland.

2.0 Analysis of previous plan

There was no previous plan.

3.0 Background information

3.1 Physical site factors

3.1.1 Geology Soils and landform

According to British Geological Society data the underlying geology of the site consists predominantly of Clyde Plateau Volcanic Formation, a wide range of compositions of lavas, tuffs and volcaniclastic sediments and Lawmuir Formation, layers of mudstone, siltstone, sandstone with seatearths, coals and marine limestones. Overlying the bedrock, the superficial geology has been influenced by glaciation i.e. Glaciofluvial ice deposits of gravel, sand and silt; Devensian Till as well as by rivers i.e. Alluvium deposits of clay, sand, silt and gravel. This underlying parent material has resulted in the soils on site being typical brown earth (FC Category 1) on the lower flatter plain with brown surface water gley (FC Category 7b) as the ground rises to the north-east (see Map 3a – Soils).

Soil Moisture Regime provides an indication of the moisture and oxygen availability within the soil, both of which are essential for root growth. The site ranges from **slightly dry** to **moist** implying reasonable aeration and water availability permitting good rooting depth.

Soil Nutrient Regime is a measure of both the availability of soil nutrients for plant growth, and the acidity of the soil (which impacts on the solubility and hence availability for uptake of most nutrients). The site has a **medium level of nutrient availability** (within the very poor to very rich range) allowing a fairly wide range of species options for the site.

Based on the James Hutton Institute Land Capability for Forestry classification the majority of the site is classed as 'F3, Land with good flexibility for the growth and management of tree crops'.

3.1.2 Climate

The site falls within the **Warm, Moist** climatic zone with Accumulated Temperature (day-degrees above 5 °C, a measure of growing season length) 1381 (1200 representing the dividing point between Cool & Warm) and Moisture Deficit 132 (90 representing the dividing point between Wet & Moist).

3.1.3 Exposure (DAMS)

Detailed Aspect Method Scoring (DAMS) is a measure of windiness of a site using the angle to the horizon in the eight compass points, weighted towards the prevailing wind direction. Scores range from 0-24: The higher the score

the greater the exposure, with scores below 13 regarded as sheltered and above 22 as too high for commercial forestry. **DAMS on the site scores a sheltered 12** (13-15 = moderately exposed, 16-17 = highly exposed), with scores generally increasing with elevation (see **Map 3b – Climate**).

3.1.4 Hydrology

The site is in the Glazert Water catchment, which is one of Scottish Environment Protection Agency (SEPA)'s pilot catchments for river restoration and natural flood management. It is also part of the EcoCo Life+ project for ecological coherence across central Scotland. SEPA's River Basin Management Planning (RBMP) unit is working closely with stakeholders in the Glazert Water catchment on these projects. SEPA recognise the planting of woodland as one of the measures which can help with natural flood management in the catchment.

There are three unnamed watercourses (tributaries of the Glazert Water) running through the site. Looking at historic map data these are burns which, more than likely, were straightened and realigned well over a century ago to improve drainage of the site. Two of these realigned burns have been diverted directly into the Glazert under the Glen Road. Several of the other burns have been realigned into one which passes underground into Lennoxtown feeding Whitefield Pond which in turn has an outlet which drains into the Glazert. The pond holds brown trout and is usually stocked annually. According to SEPA however none of these watercourses are baseline waterbodies requiring improvement under the Water Framework Directive (WFD).

SEPA's Flood map identifies the site as within a Potentially Vulnerable Area for flooding but that any flooding of the site is from surface water rather than river water and the main affected areas are the wet hollows north and south of Capieston House which are at medium to high risk (see **Map 3c – Hydrology**).

3.2 The existing site

14

3.2.1 Existing tree/shrub cover

At present there are less than 20 trees throughout the site the most prominent of which are a line of 6 mature Sycamore north-west of Balcorrach Farm and another mature Sycamore by the farm road ~150m from the Clachan of Campsie entrance to the site. There are also several trees amongst the hedgerow growing along the straightened burn which runs from Crosshouse Cottage to below Hole Farm but this small amount of trees does not constitute as woodland. A more prominent feature within the site is the matrix of approximately 3.5km of predominantly hawthorn hedgerows which

have been historically used as field boundaries. These hedgerows are in a wide range of states of repair with some still functioning as intact unbroken hedges and others more diffuse and open with only a few bushes remaining along field lines. In such areas stock control has been supplemented with fencing and/or drystane dykes. Both Hole Farm and Capieston House which are surrounded by the site have trees within their grounds. There is also approximately 330 m of mixed species hedgerow marking the boundary of the site along Glen Road and this is split over 2 sections, either side of Balcorrach Farm. This hedge is strimmed each year to avoid it impeding pedestrians on the pavement.

3.2.2 Access

There are presently four access points to the site and three of these form part of the Public Right of Way. The right of way access points are the farm track leading in from Clachan of Campsie to the west, the road to Hole Farm off of Glen Road in the south and the footpath which enters from the east off of the Crow Road. The fourth access is via a field gate on the junction of the A891 and the Clachan of Campsie Road to the south west of the site. The field access currently could only accommodate forest machinery access whilst the accesses from Clachan of Campsie and from Glen Road currently could have accommodate both forest machinery and road vehicles although neither would be ideal for future access.

3.2.3 LISS potential

The Balcorrach Wood site should be suitable to future low impact systems as it is a stable site with the potential for high amenity and recreational usage.

3.2.4 Potential markets

Future thinnings from within the broadleaves would provide for the firewood market and potentially for more niche local hardwood saw-millers. Future thinnings from conifers would provide the timber trade with green and red saw-logs as well as pallet wood and small round wood. Access for timber transportation is limited due to the constraints of current access.

3.2.5 Pathogens

15

In recent years there have been well documented outbreaks of Dothistroma Needle Blight (DNB), *Phytophthora ramorum* (*P. ramorum*) and *Chalara fraxinea* which predominantly affect pine, larch and ash species respectively. As such there is a presumption against planting most pine species, larches and ash.

3.3 Landscape and land use

3.3.1 Landscape character and value

The proposed Balcorrach Wood site lies within a very visually diverse, irregular landscape due to the nature of its urban fringe setting characterised by a complex matrix of roads, residential housing, agricultural enclosures and woodlands set against the fairly rugged backdrop of the Campsie Fells. The site is generally perceived on the small scale from their immediate urban surrounds to the west and south-east due to the topography of the site. From the Crow Road to the north however the site is also perceived on the medium scale being able to look down on the site and the surrounding area. From more obscure vantage points from higher elevation within and next to Lennox Forest to the south the site can be perceived on the large scale with its context within the wider landscape more apparent however as mentioned these are not views enjoyed by a great number of people.

According to Scottish Natural Heritage's Landscape Character Assessment of Glasgow and Clyde Valley, most of the Balcorrach Wood site falls within the area they've categorised as Broad Valley Lowland however some areas of the upper slopes fall within their Rugged Moorland Hills category. Relevant extracts from the Glasgow and Clyde Valley Landscape Character Assessment are shown below

Figure 1 – Landscape character assessment extracts

BROAD VALLEY LOWLAND - KEY LANDSCAPE ISSUES

Key landscape issues affecting this landscape type include:

- · development pressures associated with settlements within, or bordering the valleys
- the importance of conserving historic sites and their context, and encouraging awareness and appreciation of them
- the need to maintain field boundaries (hedges, walls, field boundary trees), particularly on the higher slopes where there has been decline or loss
- · the importance of encouraging water management which is sensitive to the character of these naturally low-lying, and wet valley landscapes

MANAGING LANDSCAPE CHANGE

Key characteristics

The key characteristics, features and qualities of this landscape type are:

- wide flat bottomed valley
- · presence of waterbodies, wetlands and rivers
- transport routes and settlements along the valley sides
- · transition from arable to rough grazing from the valley floor to the high valley sides
- · historic sites and communication routes along the valley sides
- · presence of farm and policy woodland

Landscape planning and management should aim to conserve and enhance the diversity of this valley landscape and its component parts. In particular, this should aim to protect the transitions between valley floor and surrounding hills and prevent developments which would obscure the inherent changes in character.

Trees and woodland: sensitivities and forces for change

This landscape type is sensitive to the loss and decline of its mature farm and policy woodlands which help to integrate valley floor and side slopes and which provide the backcloth for urban development. The characteristic pattern is that of small to medium scale woodland belts which extend up the slopes often following drainage channels, hugging gullies and framing terraces. The woodlands are predominantly broadleaved, although small conifer plantations occupy sites on the valley slopes. The landscape would be sensitive, therefore, to large scale plantations which 'infilled' field blocks, obscured valley slope field patterns and which severed the visual relationship between the valley floor and its upper slopes. Wetland margins in the valley floor support scrub woodlands which would be sensitive to drainage works and clearance for development or cultivation. The landscape would also be sensitive to the loss of other semi-natural woodlands, for example along gullies and tributary burns

Trees and woodland: planning and management guidelines

Guidelines for this landscape type are as follows:

- · encourage the conservation and active management of existing farm and policy woodlands to ensure their longevity; mixed species including exotics should be used in restocking where these were historically present; opportunities to extend these woodlands as belts around new buildings in the countryside or as connections between plantations should also be supported where this could achieve visual integration;
- · encourage the restructuring of isolated conifer plantations on the valley slopes and their extensions to connect with woodlands at lower levels; the use of transitional mixed-species belts may help to achieve visual integration. In all cases, these extensions should be of small to medium scale and should preserve the dominance of open ground allowing views to and from the valley floor
- · encourage the conservation of agricultural tree lines and small groups around farmsteads through replacement planting. Beech, sycamore, oak, ash and Scots pine are most characteristic of this landscape type
- · encourage the conservation and appropriate management of valley floor broadleaf woodlands associated with wetlands, river corridors and loch shores in recognition of their role in providing important wildlife habitats and essential features of waterside areas. They should be conserved and protected from clearance for development or from drainage alterations
- · encourage woodland development and extension along minor riparian corridors, along tributary burns and up watercourse gullies in the valley sides
- · support the use of new woodland planting to improve the integration of recent or planned developments on the urban fringe. Where developments are, or may be, prominent on valley slopes, woodland could provide a backcloth or partial screen. In the valley floor, additional broadleaf woodland could reduce visual intrusion. This would be most effective where it could be connected with existing valley floor woodlands.

RUGGED MOORLAND HILLS - KEY LANDSCAPE ISSUES

Key landscape issues affecting this landscape type include:

- · development pressures in some areas around the fringes of the hills
- · visual prominence of tall structures including masts and pylons
- · the importance of encouraging the enhancement of existing coniferous plantations and the careful assessment of any proposals for additional planting
- the need to encourage management of semi-natural woodland on lower slopes and along burnsides
- · recreational importance of these hills and the importance of supporting managed access
- management of field boundaries and pastures on surrounding slopes

MANAGING LANDSCAPE CHANGE

Kev characteristics

The key characteristics, features and qualities of this landscape type are:

- · distinctive upland character created by the combination of elevation, exposure, rugged landform, moorland vegetation and the predominant lack of modern development
- · these areas share a sense of apparent naturalness and remoteness which contrasts strongly with the farmed and developed lowland areas

Landscape planning and management should aim to conserve the upland character of the Rugged Moorland Hills. Where possible, the visual influence of existing developments should be reduced. New developments which introduce modern elements or which would undermine the sense of `wildness' and remoteness should be resisted.

Trees and woodland: sensitivities and forces for change

This landscape type contains significant areas which have the physical potential for forestry and which may become subject to forest development interests. Should this be the case, then a number of key sensitivities will require to be addressed. Forestry expansion might ultimately prejudice the balance between open and afforested ground. This may diminish the comparatively wild and undeveloped character of the moorland hills and constrain their amenity value for walking, riding, bird watching, etc. Forestry, if unsympathetically planned, may obscure the rugged topographic features such as basalt scarps and smaller outcrops. Heritage features such as settlement patterns, cairns and estate boundary walls may also be obscured or rendered inaccessible. Any forest developments which extended onto lower slopes from the plateaux would require very careful attention as the scarp slopes are visually prominent.

Trees and woodland: planning and management guidelines

These hills are generally un-wooded in character. The principal exceptions are coniferous plantations (concentrated on the less prominent plateau areas and to a lesser extent found on some of the slopes) and deciduous scrub (found in some of the gully and burn-side areas, and around some of the hill fringes). The following guidelines should apply to the management of woodland in the Rugged Moorland Hills:

- encourage the management of existing coniferous plantations on the plateau areas with the aim of achieving a more natural `fit' with topography, allowing rocky outcrops to be visible and providing more varied age and species composition
- expansion of these conifer plantations from the plateau areas onto more prominent hillslopes and scarps should be discouraged strongly
- forestry planting proposals should respect the presence of prehistoric and historic settlement and defensive sites in the hills and should retain open ground in these sensitive areas, sufficient to protect the sites and their visual context
- geometric conifer plantations and shelterbelts should be discouraged, particularly in prominent hillslope areas such as the scarp along the southern side of the Campsie Fells; remaining plantations of this kind should be removed in due course
- there may be opportunities to encourage the regeneration or expansion of broadleaf woodland and scrub along burnsides and in gullies (for example above Clachan of Campsie), creating a closer integration of lowland woodland and the moorland landscape
- conservation of areas of scrub marking the transition from lowland to moorland (for example at the western of the Kilpatrick Hills, above the Vale of Leven) should be encouraged.

Special Landscape Area

The site lies within the former Campsie Fells and Kilpatrick Hills Regional Scenic Area. This designation is no longer supported by Scottish Planning Policy, and as a result, the area is proposed by East Dunbartonshire Council as a Local landscape Area, as outlined in the Proposed Local Development Plan 2015. The site also lies within the Glazert Valley Local Landscape Area and the wider Clydeside Greenbelt (see **Appendix VII Landscape and Visual Impact Analysis Report)**.

The purpose of both Local Landscape Areas is to:

- Safeguard and enhance the character and quality of the landscape;
- Promote understanding and awareness of the distinctive character and special qualities of the landscape
- Safeguard and promote important local settings for outdoor recreation and tourism

3.3.2 Visibility

The site is visible at the small to medium scale from the south along Glen Road both from the properties that line the site and by pedestrians and motorists using the road itself. The site is also visible from the properties the site surrounds, those being Balcorrach Farm, Crosshouse Cottage, Hole Farm and Capieston House. Various residents of Clachan of Campsie, Kincaid Drive, Cumroch Road and the B822 Crow Road to the west and east also have small scale views of the site although these are narrower than those from the properties to the south. There are medium scale views of the site and its surrounds looking south from the Crow Road which are more fleeting being a

busy B-Road. Broader larger scale northerly views of the site are fleeting from the South Brae Road which descends into Lennoxtown from Lennox Forest to the south as well as from a limited few vistas from within and around Lennox Forest itself.

In order to design the proposed woodland with the appropriate consideration to the potential effect on the surrounding landscape a landscape architect was commissioned to produce a report on the potential landscape and visual effects of establishing new woodland based on analysis of the site (see Appendix VII, Map 3d – Landform Features & Map 3e - Key Landscape Considerations).

3.3.3 Neighbouring land use

The predominant neighbouring land use is of similar broad valley lowland agricultural farmland. In addition to that to the immediate south, east and west there is an urban residential land use with a golf course also beyond to the east. To the north, rugged open hill stretches over the Campsie Fell ridge. To the south and west mixed policy type woodland gives way to a predominantly commercial conifer forest landscape to the south and establishing broadleaved woodland to the north-west.

3.4 Biodiversity

3.4.1 Priority Habitat Types & Important Species

A desk based survey based on the Dunbartonshire Local Biodiversity Action Plan didn't identify the site as being significant for any of the habitats or species identified within. An onsite walkover survey for European protected and priority species didn't provide any sightings or sites of any UKBAP or LBAP species. A further walkover survey by the district Environment Forester did identify two areas of habitat interest. The area of priority habitats identified were an area of basin mire (a matrix of Lowland Fen priority habitat and non-priority Neutral Grassland) at NS 6248 7866 and an area of Upland Flush, Fen & Swamp at NS 6199 7943.

3.4.2 Invasive Non-Native Species

Grey squirrel (*Sciurus carolinensis*) – As a woodland is yet to be established there aren't currently any Grey squirrel within the management area however due to the significant surrounding woodland cover it is expected that Grey squirrel will seek to occupy the site in the future.

3.5 Heritage

Following FES Historic Environment Planning Guidance, this Land Management Plan amendment describes and considers the conservation and management of the historic environment. The plan includes details of all the most significant undesignated features i.e. the ruin of the former Capieston House and several drystane dykes. Important historic environment features are surveyed, recorded, mapped and monitored to ensure and demonstrate Forestry Commission Scotland compliance with the UK Forestry Standard. This plan describes the actions appropriate to the protection of significant known historic environment features.

A desk-based and a basic walkover archaeological survey were undertaken and have been incorporated into the Forester GIS Heritage Module Geodatabase. This ensures that undiscovered historic environment features have been mapped and recorded prior to forestry establishment and management operations - and will ensure the continued comprehensive protection of the known archaeological resource. No further archaeological surveys are necessary (as per the UKFS Forests and historic environment guidance (2011) - Guidance note for FD Environment Leads and Planners) as the site has been previously improved with the same land use for well over a century.

A desk based survey coupled with a walkover survey didn't identify any significant archaeological features other than the ruin of the former Capieston House and several drystane dykes. A local historian has been commissioned by the district to produce a report into the history of Capieston House to provide extra context to the site.

3.6 Community & Recreation

3.6.1 Community

22

The site is situated close to three communities, Lennoxtown, Clachan of Campsie and Haughhead with two local primary schools; St Machan's and Lennoxtown close by but no nurseries or secondary schools in the near vicinity. There are several active local community groups and a community council for the area. Most of the site falls within 1 kilometre of Lennoxtown which, with a population of greater than 2000 people, qualifies Balcorrach Wood for the Woodlands In And Around Towns (WIAT) programme. This programme aims to improve the quality of life in towns and cities and as such

the woodland will be designed and managed to develop opportunities for improved social, economic and environmental benefits.

3.6.2 Recreation

The site currently is used, almost exclusively, by walkers and dog walkers travelling the public right of way. With stock grazing the site the public right of way has become poached, muddy and wet in places and with hedgerows suffering from previous neglect has also become obstructed in parts. The right of way leads to both the Campsie Glen geological feature and forest which was recently planted in 2011. There is also significant local interest in cycling with a bike shop located in Clachan of Campsie and the B822 Crow Road being a draw for cyclists both local and from further afield as a challenging hill climb.

4.0 Analysis and Concept

Using survey work and research, a broad range of factors were acknowledged and considered to recognise the site's key features (see Map 4a – Survey & Key Features) which, informed by the objectives set out in the management plan brief (see Appendix IV) were used to identify the opportunities and constraints which exist within the management plan area and from there develop an initial concept (see Table 2 - Analysis and Initial Concept Development below). This initial concept was then used to produce a concept map (see Map 4c - Concept) which summarised the initial main aspirations and intentions for the management plan. This management concept formed the main basis for the public consultations held in March 2016.

Table 2 - Analysis and Initial Concept Development

Strategic Priority	Survey	Opportunities	Constraints	Concept
Accessible				
	The existing Right of Way linking	There is an opportunity to realign	Potential opposition from those	The existing Right of Way will be realigned
	Lennoxtown to Clachan of Campsie	the right of way linking	who might prefer to retain the	to follow a new extended route as part of
	is in places difficult to cross due to	Lennoxtown to Clachan of	exiting route. Potential opposition	the wider woodland design. The network of
	an accumulation of factors such as	Campsie and beyond enabling an	from the local area access officer.	rides will still allow users of the ROW to
	poor drainage, heavily poached	improved visitor experience		travel between Lennoxtown and Clachan of
	ground due to cattle, unmanaged	through the envisaged woodland		Campsie but also provide the visitor with a
	overgrown hawthorn hedgerows.	on more suitable terrain.		variety of alternative circular paths within
				the site to enjoy.
	The Crow Rd is a popular cycling	Whilst the public roads already	Residents of Clachan of Campsie	The informal network of routes along
	route and the viewpoint on the	connect Clachan of Camspie to	and Lennoxtown may be opposed	established woodland rides may not
	bend a frequently visited spot. The	the Crow Rd and wider popular	to any potential increase in	initially be suitable for bicycles however if
	Bike and Coffee Shops in Clachan of	cycle routes having a potential	footfall in and around their	rides in time are upgraded to formal paths
	Campsie evidences the areas	trail through the woodland would	neighbourhoods.	this could provide a benefit to the local
	popularity with cyclists and outdoor	provide an extra dimension for		community and wider cycling community.
	enthusiasts alike.	cyclists to enjoy.		
Cared for				
	There is an internal matrix of linear	Use the local topography to guide	In order to balance appropriate	Planting areas will be designed to fit well
	field boundaries made up of	the position and shape of planted	planting areas with recreational	within the wider landscape and retain
	drystane dykes, drainage ditches,	areas so they fit well within the	and operational access, gaps may	features of habitat and heritage interest.
	stock-fencing and hawthorn	wider landscape whilst retaining	need to be created in existing	
	hedgerows.	existing habitat and heritage	hedgerows and/or dykes.	
		features within them.		

There are almost ubiquitous good	Whilst the ubiquitous views	Potential opposition from those	Planted areas will be designed so as to
views of the southern slopes of the	throughout the site will no longer	who would prefer to retain the	minimise the impact on views of the
Campsie Hills across the site.	be had, enjoyment of the views	site in its current format with no	Campsie Fells from in and around the site.
	should be enhanced by judicious	loss of views.	
	use of framing of views and		
	enabling glimpsed views both		
	from within the site and from the		
	surrounding area.		
2 overhead power lines cross	The unplanted safety buffers	Power lines are linear features	Appropriate buffers to protect utilities will
sections of the site servicing Hole	along power lines could provide	which, without good use of	be established and these will be designed
and Crosshouse Farms. A mains	opportunities for views into,	design, could detract from	to maintain views into, within and outwith
water supply follows the route of	within and out-with the	surrounding natural shapes being	the site and also judiciously lined with low
the Right of Way from the access	woodland.	created.	growing shrub species to soften hard crop
road to Hole Farm up to the			edges.
remnants of Capieston Farm.			
The internal farm buildings and	Judicious use of design can be	Retaining a number of views	Planted areas will be designed so as to
various surrounding properties look	used to help retain and/or frame	reduces the net plantable area	minimise the impact on views to properties
on to the site and the Camspies	various views currently enjoyed	where trees may otherwise have	in and around the site.
which provide a backdrop.	by the properties within and	trees on them.	
	surrounding the site.		
The surrounding landscape is a	With the relatively wide palate of	Transforming the site from a	In order to maintain an element of
matrix of agricultural land and	species the site affords us we	patchwork of grazing fields to	continuity with the surrounding landscape
mixed woodland. To the west is the	have the ability to mirror the	diverse woodland will alter the	an area of 'policy' woodland will be created
'policy' woodlands within the	surrounding landscape and create	landscape which may be opposed	to the west of the site and a relatively
grounds of the Schoenstatt. To the	a diverse woodland. A policy area	by the agricultural community	small stand of conifer will be planted in the
south are the predominantly	could be created in keeping with	and those who prefer the present	natural hollow above Hole Farm providing
commercial conifer Lennox Forest	that around the Schoenstatt; a	layout.	some symmetry to the woodland across
and the more mixed woodland on	predominantly broadleaved mixed		the glen to the south. Additional conifers in
the lower northern slopes across	woodland will allow for some		small groups within the predominating

	the glen. To the north west the	symmetry with the planting		broadleaves will also provide further
	recently planted Camspie Glen has	across the valley to the south.		textural diversity.
	yet to impact on the landscape but			
	in time will enhance the diverse			
	mixed nature of the area.			
Productive/Accessible				
	There are 3 access points to the	A new road to the site from the	Ideal access points along A891	The design of the new woodland will
	site, one via the Crosshouse Road	A891 Glen Road to the south	are limited due to utility	incorporate a series of forest rides carefully
	from Clachan of Campsie in the	could provide a more suitable	constraints and traffic	chosen to, in the short-term, provide an
	west, the second via the access	route to access the crop across	considerations such as suitable	excellent network of informal recreational
	road to Hole farm in the south off	the site for forest operations and	lines of sight.	access some of which may be upgraded
	the A891 Glen Rd. Both these	timber haulage purposes. A new		over time but also to allow for a suitable
	routes can be accesses by vehicles.	road could also help facilitate		routes for a forest road for operational
	The third access is via the Right of	connectivity between either ends		access in future.
	Way off of the B822 Crow Road in	of the site.		
	Lennoxtown in the west and this is			
	only accessible to pedestrians.			
Productive/Healthy				
	The soils on the lower ground are	The sheltered nature of the site	Although much of the site is	Site conditions are suitable to allow a
	predominantly fertile brown earths	coupled with the relatively fertile	suitable for productive	significant proportion of productive
	moving toward brown type surface	soils provide an opportunity to	commercial conifer the	broadleaves to be planted within the site.
	water gley on the upper slopes. The	plant a wide range of species	surrounding landscape suggests	Various species are site suited so the most
	site is fairly sheltered.	which can be used to create a	that planting too much of this	appropriate species will be used to develop
		visually, and texturally diverse	would not be in keeping with the	and crop which will be productive, healthy
		woodland capable of producing	surrounding landscape character	and adapted to predicted climate change.
		good quality hard and softwood	and planting as much of the site	The crop will likely require appropriate
		timber.	with productive broadleaves	protection from browsing damage.
			would be more appropriate. To	
			establish broadleaves and softer	

			conifer species protection from browsing will be necessary either	
			from deer fencing or protective	
			tubes.	
Treasured				
	The south east of the site has an	As this area directly backs on to	Agreeing the nature and design of	Where the site backs on to Lennoxtown,
	obligation to provide a Community	Lennoxtown there is opportunity	a community area may take some	the forest district will engage with the local
	Greenspace inherited within the	to engage with the local	time and the eventual	community with a view to incorporate their
	acquisition of the site as part of the	community to create an entrance	implementation of a community	ideas and interests into the development of
	previous plans to develop it for	area which reflects their ideas	area may be dependent on	this transitional welcome zone between the
	housing.	and interests and encourages use	available funds etc.	town and the woodland.
		of the site and exploration of the		
		wider woodland network.		

5.0 Management Plan Proposals

The proposals detailed below describe the rational and methodologies to be employed in order to achieve the objectives set out in Appendix IV. Some of what is proposed for Balcorrach Wood will be dependent on various factors as the availability of suitable funding, consultation such neighbours/community etc. Such proposals constitute possible future projects for FES to be delivered in partnership/agreement with others. Appendix II -Management Table highlights which aspects of the management of the site fall under our 'general management functions' and which might constitute a 'potential future project'.

The proposals for this site have been produced based on sound silvicultural and environmental principles and follow the requirements, guidelines and recommendations set out within the UK Forestry Standard, the UK Woodland Assurance Scheme, FC Bulletin 124 Ecological Site Classification for Forestry and FC Bulletin 62 Silviculture of Broadleaved Woodland, FC Bulletin 115 Alternative Silvicultural Systems and the current FC edition of Forest and Water Guidelines.

5.1 Woodland Creation

The proposed woodland will function to produce productive hardwood timber and provide general amenity and biodiversity value. It is the intention to manage the woodland sensitively to all these aspects.

5.1.1 Planting prescriptions

The proposed woodland will be made up of distinct woodland categories:

- Lowland mixed deciduous woodland
- Conifer
- Policy Woodland
- Low growing woody shrub
- Native wet woodland

The indicative species, areas, densities and spacing for each category are listed in the following sub-sections (see **Map 5a – Planting Design & Species**). 15.9 Ha of the site is out with the approval area of this plan as it already has planning approval as part of a Section 75 obligation inherited with the purchase of the site (see later section 5.2.8).

5.1.1.1 Lowland mixed deciduous woodland

Table 3a – Lowland mixed deciduous planting details

Map ref.	Species	Density (Stems/ha)	Spacing (m)	Area (ha)
1a	Pedunculate oak/Silver birch/Common alder/Aspen	3000	1.8 x 1.8	25.2
1b	Red oak	5100	1.6 x 1.2	1.6
1c	Wild cherry	500	4.5 x 4.5	1.6
1d	Common alder/Goat willow/Rowan	1100	3.0 x 4.0	1.1
1e	Sessile oak/Pedunculate oak	5100	1.6 x 1.2	6.3
1f	Sycamore	3000	1.8 x 1.8	4.5
1g	Common alder	3000	1.8 x 1.8	2
1h	Silver birch/Pedunculate oak	3000	1.8 x 1.8	1.2
			Total	43.5

This plan will create 43.5 Ha of lowland mixed deciduous woodland which will be in addition to the 3.8 Ha due to be planted as part of an existing Section 75 obligation to create a recreational woodland inherited in the purchase of site.

5.1.1.2 Conifer

Table 3b - Conifer planting details

Map ref.	Species	Density (Stems/ha)	Spacing (m)	Area (ha)
2a	Douglas fir	2500	2.0 x 2.0	5.6
2b	Norway spruce	2500	2.0 x 2.0	11.3
			Total	16.9

This plan will create 16.9 Ha of conifer woodland which will enhance important visual diversity within the crop and complement the surrounding valley woodland character.

5.1.1.3 Estate 'Policy' Woodland

Table 3c – Policy planting details

Map ref.	Species	Density (Stems/ha)	Spacing (m)	Area (ha)
3	Mixed Broadleaves (70%) e.g. Sessile oak, Beech, Sweet chestnut, Horse chestnut / Mixed Conifers (30%) e.g. Grand Fir, Coastal Redwood, Western Red Cedar	5100	1.6 x 1.2	6.2
_			Total	6.2

This plan will create 6.2 Ha of policy style woodland referencing the neighbouring character of both the Schoenstatt and Lennox Castle Policy Woods to complement and enhance the local character.

Aug 2017

5.1.1.4 Low growing woody shrub

Table 3d – Low growing woody shrub planting details

Map ref.	Species	Density (Stems/ha)	Spacing (m)	Area (ha)
4a	Hawthorn (40%) /Blackthorn (30%) /Guelder rose (30%)	1100	3.0 x 3.0	0.7
4b	Hazel (50%) /Elder (50%)	1100	3.0 x 3.0	0.1
4c	Rowan (40%) /Elder (30%) /Hawthorn (30%)	1100	3.0 x 3.0	0.2
4d	Rowan (25%) /Hazel (25%) /Wych elm (25%) /Elder (25%)	1100	3.0 x 3.0	0.1
4e	Hazel (50%) /Wych elm (50%)	1100	3.0 x 3.0	0.1
			Total	1 2

This plan will create 1.2 Ha of low growing woody shrub which will be in addition to the 2.7 Ha due to be planted as part of an existing Section 75 obligation to create a recreational woodland inherited in the purchase of site. This planting will add important structural diversity to the wood providing visual interest and also various berries, nuts and flowers. The shrubs will also allow for an increased woodland area as their size will allow important views to be retained.

5.1.1.5 Native wet woodland

Table 3e - Native wet woodland planting details

Map ref.	Species	Density (Stems/ha)	Spacing (m)	Area (ha)
5	Goat willow	1100	3.0 x 3.0	0.2
			Total	0.2

This plan will create 0.2 Ha of native wet woodland which will be in addition to the 1.2 Ha due to be planted as part of an existing Section 75 obligation to create a recreational woodland inherited in the purchase of site. Planting of the wetter hollows which are prone to waterlogging will improve their biodiversity and the forest habitat connectivity of the site.

5.1.2 Ground preparation

As the area is of sensitive landscape value, ploughing will be excluded and site sensitive ground preparation methods will be adopted, this will be fully compliant with Forest and Water Guidelines.

With regards drainage, if it is necessary, appropriate methods will be employed in accordance the current edition of the Forests and Water

Guidelines, no drainage methods are anticipated in areas of native wet woodland as species will be matched to site type.

5.1.3 Protection from browsing

The site is currently under grazing and stock fenced and therefore when the stock is taken off there will be a vacuum which is expected to be filled by an influx of the surrounding roe deer population. In order, therefore, to protect the establishing trees it is expected that the crop will need to be fenced to exclude deer and/or protected with tree guards. In addition, with the vegetation no longer grazed, cover for voles may be increased and therefore vole guards may be required to further protect the seedlings. Whilst establishing the site access to the public right of way will be retained.

5.1.4 Landscape

The Landscape Architect's report, which forms **Appendix VII**, and implementing good forest design principles has informed both the planting design and proposed species suggested in **Map 5 – Planting Design & Species**.

The design has been thoughtful to:

- emphasize, subtly, the local topography features such as drumlins
- create a 'policy-style' woodland adjacent to Clachan of Campsie
- preserve key views from the Crow Road
- conserve the perceived scale of the dramatic cliff backdrop
- promote visual diversity with a variety of broadleaves interspersed with site suited mixed conifers which will reflect the local topography and surrounding character
- retain suitable areas of open space for added visual diversity and to maximise the opportunities for views from access routes and nearby housing

5.2 Woodland Management

The management of the five distinct woodland categories will have their own distinct management prescriptions.

5.2.1 Lowland Mixed Deciduous Woodland

Long term silvicultural aims

The long term objective for this productive crop is to produce quality timber.

Suggested species specific objectives are provided in **table 3** below:

Table 3 – Suggested targets for specific species

Species	Objective
Oak (Sessile, Pedunculate, Red)	Produce quality timber with 6-8m clean bole and
	60-70cm dbh
Sycamore/Big leaf maple	Produce quality timber with 8m clean bole and
	80cm dbh
Silver birch/Common alder/Aspen	Produce quality timber with 6m clean bole and
	40cm dbh
Wild cherry	Produce quality timber with 8m clean bole and
	50cm dbh

These objectives are only suggestions at this stage as more precise goals cannot be determined until the crop has developed. As the various species approach their first thinnings a determination should be made on whether to delay thinnings to achieve greater clean bole length and what the target final girth (diameter at breast height, DBH) should be.

To achieve these aims various interventions will be necessary during the rotation of each species such as leader forming, pruning, re-spacing and thinning. The establishment prescriptions such as densities and spacing have been suggested in order to encourage good vigour, form and self-pruning where applicable to facilitate the trees achieving their intended objectives.

Under-planting oak stands will be necessary after approximately two thinnings (~50 years) to manage light levels and prevent undesirable epicormic side branching which could devalue the future timber. Appropriate shade tolerant species such as beech, sycamore, hornbeam, elm & hazel should be considered as future understory species.

It is suggested that these stands will be suitable for Alternative to Clearfell (ATC) systems of management such as Continuous Cover Forestry (CCF) and/or Low Impact Silvicultural Systems (LISS). A Decision on future silvicultural systems will be made in future management plans however it is recommended that for the more light demanding species such as oak, alder, birch, aspen and wild cherry a seed tree or group system may be appropriate with a group system also appropriate for the sycamore and maple.

5.2.2 Conifers

The conifer element of the wood will be managed to produce quality timber and will be thinned at appropriate intervals, to be determined in future plans, to improve the crop and facilitate future natural regeneration in these areas.

5.2.3 Estate 'Policy' Woodland

Large crowned broadleaves and stately conifers should dominate this woodland. Core species, such as oak, beech and chestnut as well as cedars, redwoods & firs create the distinctive, mature and well established character of policy woodland. Such species will dominate planting. Relatively small trees, such as birch and rowan may be used sparingly to add interest around the edges of the woodland. Using the more unusual species will contribute colour and diversity of form to the policy woodland. Figure 2 below provides an example of some of the key features of policy woodland. The policy woodland area will be planted at relatively high densities to encourage good form and vigour which will, after future thinning, produce an attractive, statuesque stand distinctive of policy woodland.

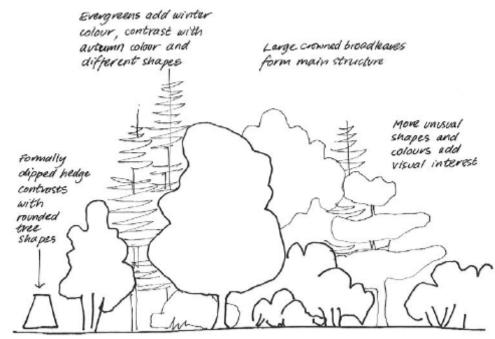


Figure 2 - Cross section of policy woodland summarising key features

5.2.4 Native Wet Woodland

Areas of native wet woodland once established will have minimal management intervention other than for any tree safety issues that may arise. Natural processes should be allowed to shape these stands enhancing biodiversity.

5.2.5 Low growing shrubs

Areas of low growing shrubs will be planted to achieve multiple purposes. Judicious positioning of low growing species will allow views from adjacent properties and various locations to be retained; planting of species which produce berries, seeds and flowers will provide a potential benefit to the local community. Providing cover for various forms of wildlife should enhance biodiversity whilst reducing the area which, if left open, has the potential to go

rank once it is no longer grazed. Planting areas should allow suitable gaps between groups in order to facilitate any future management that may be required. Once established, the woody shrub species will be observed annually during the growing season and should any particular shrubs become overgrown or too tall an appropriate management regime will be created and implemented. The existing veteran hawthorn hedgerow avenue that flanks the public right of way on the western edge of the section 75 area will have a defined trimming regime every 2 or 3 years helping to shape the hedge, open up the right of way access and create the best conditions for the hedge to provide important habitat for wildlife. Cutting should be between January – February before the bird breeding season and allowing wildlife to take advantage of the autumnal berries. Due to its veteran nature appropriate care will be taken in managing this feature.

5.2.6 Open Land

This will consist of designed gaps between planting to retain important views and facilitate recreational access through the site. The public right of way through the site will also form part of the open ground. The public right of way and suitable desire lines/rides will be mown to encourage and promote recreational use. The small areas of lowland fen and upland fen/swap identified will not be planted save for some limited native species sparsely dotted around the lowland fen edge but will be left as open. These areas will not however be formally managed but will be left to develop and overtime may develop interesting woodland edge habitat. The area managed as open may increase as and when the function of the community area is decided upon.

5.2.7 Hydrology

Operations and planting on the site will adhere to the guidance in the latest version of the Forest and Water Guidelines. The ground preparation described in section 5.1.2 should ameliorate the potential effects of run off and, with the removed grazing, the grass sward will also reduce run off until eventually the establishing tree canopies and rooting systems increase interception of rainfall, increase soil stability, improve soil permeability and ultimately reduce the effects of flash flooding using natural flood alleviation.

The areas SEPA's flood map identify as of medium to high flood risk from surface water will have low density native wet woodland species diffusely planted in and around them which, with the surrounding afforestation, should cumulatively reduce the effects of surface run off and increase water uptake from the soil.

In addition to the natural flood alleviation benefits of the planted areas, 5 metre buffers will be applied to the burns within the site within which no

planting will take place; this will allow the potential for future meandering of burns reducing flow rate at peak times. Similarly there may also be future potential to create leaky woody debris dams at appropriate points to reduce flows.

5.2.8 Hole Farm - Section 75 Recreational Woodland

When purchasing the site from the previous owner FES inherited a local authority planning obligation to create a recreational woodland, applicable to 15.9 Ha of the site to the south east. To fulfil that obligation, and in lieu of amendment approval of this plan, the district produced a management plan to satisfy the council of our short and long term intentions for the recreational woodland area. Much of the management mirrors the management detailed in the previous sections however further detail is available within **Appendix VIII** – **Hole Farm Section 75 Recreational Woodland Management Plan**.

5.3 Biodiversity

5.3.1 Priority Habitat Types

The lowland fen and the upland flushes, fens and swamps UKBAP priority habitats will not be formally managed as they are isolated patches with no wider linkage context but rather they shall not be planted save for some limited native species sparsely dotted around the lowland fen edge and will be allowed to develop naturally after over a century of grazing.

5.3.2 Important Species

No European protected or priority species have been identified during the surveying for this plan, however should any species be discovered in future then the appropriate conservation will be applied as per the relevant FCS Policy and Guidance.

5.3.3 Invasive Non-Native Species

Below is the methodology to be employed for the INNS which is likely to move into our management area in accordance with the District Invasive Non-Native Species Plan 2014-2019.

Grey squirrel (*Sciurus carolinensis*) – Red squirrel (*Sciurus vulgaris*) are not found in this area so therefore greys are not deemed a threat to this species here and therefore this is not a driver for controlling them. However Red squirrels have been spotted in Milton of Campsie and Croy in 2016 and therefore may migrate to the site in future. In addition; as the woodland is being managed for productive broadleaves future damage to the crop is a possibility. Susceptible species such as oak, sycamore and beech will be monitored for squirrel damage and should damage be observed appropriate control may be implemented.

5.3.4 Deadwood

It is the district policy to contribute around 20m³/ha of deadwood averaged across the whole woodland area in each forest block. This aspiration is dependent on the site type and long term objectives. As Balcorrach Wood is a woodland creation site the deadwood potential is low therefore during the life of this plan the hedgerows and any veterans will be retained.

This approach will be weighed against the health and safety implications in regard to priority visitor zoning areas detailed within the FC Practice Guide Managing Deadwood in Forests & Woodlands and appropriate steps should be taken to balance the approach above with public safety.

5.3.5 Wildlife Management

As there is no woodland to protect as yet and the site is currently grazed there has been no need to manage the site for deer. As suggested previously, to protect the establishing crop, fencing and/or tree guarding are most likely to be the methodologies employed. Once the crop has established and fencing/tree guards are removed future plans will detail the deer management prescription for the site. Further details on our deer management can be found within the Scottish Lowlands Forest District Deer Management Strategy (in conjunction with the Deer Overview Map).

5.4 Heritage

In general, all significant archaeological sites will be protected and managed following Forests and historic environment guidelines (2011), the FCS policy document: Scotland's Woodlands and the Historic Environment (2008) and the supporting FES Historic Environment Planning Guidelines (available from the FCS Archaeologist). Access roads and fence lines will be surveyed by Forest District staff prior to any work being undertaken in order to ensure that upstanding historic environment features can be marked and avoided. At planting, work prescriptions protect relevant historic environment features apportioning appropriate buffers clear from ground disturbing operations and planting. Opportunities to enhance the setting of important sites are considered on a case-by-case basis (such as the views to and from a significant designated site).

As mentioned in section 3.5 we also have a local historian working with us as a volunteer to record and investigate the Capieston ruins. They have recently completed their field survey of the ruin and have also been able to start looking into the census and archives for the ruin to find out who lived here and some of the history. A report will be produced with measured plan drawings of the ruins and a summary of the history, hopefully by the end of 2016. This

will help us to understand the ruin better and provide information that will help engage the local community in the future.

5.5 Community & Recreation

FES district staff will liaise with the local community to promote and encourage use of the wood and Community Rangers will continue to seek opportunities to develop new and forge existing links with schools, community and user groups to increase awareness and enjoyment of the site.

5.5.1 Community

Our communities' team will work to establish new, and forge existing, relations with various user groups e.g. wildlife, rambling, school and nursery groups etc. to encourage use of the site. We are also open to ideas from the community or particular user groups with suggestions to improve the site as it develops. We will also explore with East Dunbartonshire Council the potential to provide a community growing area within the site. In addition to the aesthetic enhancement of the site, planting the site will provide opportunity for educational and health benefit. It is hoped that nursery and school groups might use the site as outdoor learning space and to learn about nature. The planting of species which produce edible berries or seeds which can be picked by the visitors it is hoped will provide further community benefit. Coppicing of species e.g. willow, hazel may also provide educational benefit to demonstrate weaving or fencing. A proposed 'Community Area' has been identified within the Section 75 obligation area beside Lennoxtown and our Communities team will liaise with the community to explore what they would like to see provided for in this area (see Appendix VIII - Hole Farm Section 75 Recreational Woodland Plan).

5.5.2 Recreation

As well as the existing right of way the planting design will incorporate rides (spaces between planted areas) which will provide opportunity for visitors to take alternative routes through the site allowing for extended walks and circular routes. Initially suitable rides will be subject to a mowing regime of several cuts each growing season providing improved walking conditions. It is also envisaged that in future, various mown paths may warrant being surfaced potentially with woodland furniture e.g. benches, picnic tables. This will be dependent on use of the site, funding and liaison with the community. It is intended that the indicative ride network provides links to the wider Balcorrach Wood ride network facilitating enhanced connectivity between Lennoxtown and Clachan of Campsie but also to provide future opportunity to link more widely e.g. the Strathkelvin Railway Path.

5.6 Access

5.6.1 Visitor

Visitor access will continue to be maintained at the three existing access points to the public right of way. It is in envisaged that further future entrances to the wood will be created to facilitate both improved ease of access and enhance the initial experience the visitor has to the site. There are no plans to provide any visitor parking for the site. As mentioned previously access will be provided initially via existing tracks or mown woodland rides but it is hoped that in future these may be upgraded to more formal paths. The public right of way will remain in its current route with additional alternative routes developed over time (see **Map 5b – Future Access**).

5.6.2 Management

At present we have a right of access via the road leading from Glen Rd to Capieston House and Hole Farm which should be suitable during the initial period of establishment. During this time there will be limited traffic accessing the site for the purposes of preparing the ground, securing the site (e.g. fencing) and planting trees. It would not be expected for machinery larger than a tractor to use this road and a few cars for a few months after which the requirement to use this access will be minimal. For future management the site ideally requires a new forest road access from the public road. This is thought to be possible via a future new access from the Glen Road to the south of Hole Farm west of the current access (see Map 5b). It is hoped a forest road with turning area will be created, possibly during the life of this plan or the next, prior to any necessary initial thinning operations and management of the site beyond that. Appropriate infrastructure such as locked barrier gates would be installed to secure the site against the potential for anti-social access to the site e.g. quad and dirt bikes which coupled with regular visits by operations and communities' staff should reduce the potential attraction for such pursuits.

5.7 Critical Success Factors

The success of this plan will be based on whether the objectives set out in the Management Plan Brief (see **Appendix IV**) are achieved. The table which forms **Appendix V** details how each objective will be appraised, where and when each objective will be monitored; by who and where it will be recorded. This will enable an evaluation of success as part of the mid and end of plan reviews.