Easterton & Duntelchaig Long Term Forest Plan
2025-2045

Prepared by Lumsden Forestry Ltd

A. Description of Woodlands

A.1 Property Details							
Property Name:	Easterton & Duntelchaig Wood			Business Reference Number:		Main Location Code:	
Grid Reference: (e.g. NH 234 567)		Nearest town or locality:	Inverness	Local Authority:	Highland	LTFP Plan area (hectares):	175.96
Owner's Details				**Agent's Details**			
Title:		Forename:		Title:		Forename:	
Surname:				Surname:			
Organisation:		Position:	Owner	Organisation:		Position:	
Primary Contact Number:	See right	Alternative Contact Number:	See right	Primary Contact Number:		Alternative Contact Number:	
Email:	See right			Email:			
Address:				Address:			
Postcode:		Country:		Postcode:		Country:	UK

A.2 Location and Background

Provide details on the wider context of the LTFP area. Append a 1:25,000 or 1:50,000 map with contours and the grid reference of the main forest entrance. The map should show the estate boundary based on the Business Reference Number (BRN) and the woodland boundary, if different.

Easterton and Duntelchaig Wood is located in the Aird and Loch Ness ward of Highland Council local authority region, approximately five miles south of Inverness. The property covers 175.96 Hectares (Ha) of mixed commercial plantations/native woodlands and open hill ground, which sits on the northern shore of Loch Duntelchaig.

Easterton and Duntelchaig wood was originally two woodlands (Easterton Wood in the north and Duntelchaig Wood in the south). They were purchased in 2011 and came into single ownership which continues to this day.

The previous Easterton and Duntelchaig Long Term Forest Plan was approved in 2014 (Case No: 4885552). Since 2014, the main focus on forest management has been low scale felling of mature conifer blocks, mainly Sitka spruce and poor growing Lodgepole pine in the north of the property in compartment 1. Key part in facilitating the restructuring process was to extend the internal forest road to access the southern compartments and establish a Timber Traffic Management Plan agreement that allowed a sustainable flow of timber from a number of neighbouring properties to use the sensitive surrounding road networks. Compartment 1, which was felled under the previous plan, has been restocked as per the approved Restock Plan. 6.86 Ha of Compartment 8 was felled in 2024 and is awaiting restocking.

Location Map is shown in Appendix 1.

A.3 Existing Schemes & Permissions

Provide details on any existing forestry permissions, grants, EIA approvals, previous plans, or cases in progress.

Type (e.g. Felling Licence)	Reference No.	Details
Easterton and Duntelchaig LTFP 2014 - 2034		Bowlts Chartered Surveyors Long Term Forest Plan.

A. 4 Stakeholder Engagement

Include a summary of the main points from Scoping and where they are addressed in the plan. Append pre- and post- scoping maps, and the full Scoping Report.

Scoping – Main Points	LTFP Reference (section/page):
Timber haulage uses a fragile road network around Bunachton. TTMPs to continue to be used to safeguard road infrastructure. Communication with neighbouring properties to plan felling operations and agree on annual tonnages per property.	See sections B.1.
Deer management to include long term commitment to reducing deer numbers, specifically sika (NatureScot).	See section B.1. & DMP

A.5 Long Term Vision and Management Objectives

Tell us how you intend to manage the forest in the long term and your goals for its development.

Vision

Describe your long term vision for the LTFP area.

The long term vision of Easterton and Duntelchaig is to produce a high yielding, commercially sustainable forest which improves the woodland condition through divers species choice and diverse structures where appropriate. Easterton and Duntelchaig Wood will look to maintain and create multiple benefits, including good quality habitat for biodiversity, as well as increasing visual diversity within the wooded and wider landscape. Easterton and Duntelchaig Wood will remain an attractive place for nearby residents and visitors to enjoy, with access being maintained through the property, in line with The Outdoor Access Code.

Management Objectives

Give your objectives of management and also how you will manage the forest area sustainably. Your objectives should be specific and you should also be able to measure their outcomes.

No.	Objectives (including environmental, economic and social considerations)	Indicator of objective being met
1	Improve woodland composition and structure, through species choice, open ground and silvicultural management, for ecological and landscape benefits. This will underpin the objective of managing the woodland in line with UK Forestry Standard (UKFS).	• Adopt a Low Impact Silvicultural System within compartments 1, 7, 8, 9, 10, 12 & 13 to help create a more complex woodland structure with varying canopy layers; • Reduce deer numbers through culling to allow diverse tree species to be planted and natural regeneration to occur; • Provide/maintain a habitat with multiple age classes, species and open areas.
2	To maintain the commercial value of the forest and retain the capacity to produce high quality timber.	• Create and maintain high quality, sawlog-producing stands of timber; • Remove larch stands and replace with species such as Scots pine to mitigate against the potential for spread of *Phytophthora ramorum*; • Reduce unstable and windblown stands.
3	Improve woodland composition and structure, through species choice, open ground and silvicultural management, for ecological and landscape benefits.	• Provide/maintain a habitat with multiple age classes and species; • Create/maintain a LISS area within the forest, specifically with native woodland; • Hold back conifers from watercourses and increase open ground; • Where appropriate, restocking using native broadleaves instead of commercial conifer species.

A.6 General Site Description

Provide details under each of the headings below. Append maps if appropriate for each subsection.

A.6.1 Topography
Easterton and Duntelchaig lies between the altitude of 220m – 365m The property is located on the northern, western and southern slopes of Creag a Chlachain with the highest elevation sitting on the top of Creag a Clachain, which does make it reasonably prominent within the surrounding area. To the south, the property gradually descends to its lowest point where it meets the northern shore of Loch Duntelchaig. Similarly in the north, the property gradually falls to 260m where it meets the single-track public road.

A.6.2 Geology and Soils
Information comes from the British Geological Survey. The bedrock (solid) geology of the area is principally comprised of two groups split by a boundary that runs southwest from the summit of Creag a Chlachain. To the west is the Inverness Sandstone Group, which is described as "Red sandstone sequence incorporating the Daviot Conglomerate, Nairnside Sandstone, Leanach Sandstone, Inshes Flagstone and Hillhead Sandstone formations". To the east is Dava Succession – Gneissose Semipelite, which is defined as "heterogenous succession of predominantly gneissose psammite, semipelite and subordinate quartzite. The superficial (drift) geology is largely 'hummocky (moundy) glacial deposits – diamicton, sand and gravel. The combination of bedrock and superficial geology has combined to create a moderately fertile, reasonably well drained site. There are exceptions to this with wetter, leff well drained areas in compartment 1. Soils are varied with podzols, peaty podzols and peaty gleys common. There are also some localised areas of brown earth and more skeletal soils towards the summit of Creag a Chlachain.

A.6.3 Climate
Climate information comes from the Inverness climate station of the Meteorological Office, which is the closest climate station to Glenfarigaig Woodland. Average yearly rainfall is 755.02mm; average maximum and minimum annual temperatures are 12.68 and 5.22 degrees Celsius respectively; average sunshine hours are 1249.67 per year. The climate is therefore well suited to growing trees, and rainfall is spaced fairly evenly throughout the year.

A.6.4 Hydrology
Even though Easterton and Duntelchaig sits on the northern shore of Loch Duntelchaig the property does not have many watercourses running through it. There are a couple of smaller burns which are found in the north (compartments 1 and 3), which eventually meander through neighbouring property and enter Loch Bunachton to the north. Adjacent to the property on the lower, eastern slope of Creag a Chlaichain, a small watercourse forms and enters a larger watercourse that flows into Loch a Chlaichain - although its presence should be noted it is not thought that future forest operations will have any impact on this watercourse or Loch a Chlaichan. Loch Duntelchaig drains into Loch a Chlaichan, and at this point Scottish Water has some infrastructure that should be noted. The property does sit in the catchment area of Loch Duntelchaig, an important reservoir supplying the city of Inverness. As such its immediate catchment area, including the wood, is designated by SEPA as a drinking water protected area. This means it will be managed according to the best practise laid down in the Water Framework Directive, Guidance Note - Forestry activities around Scottish Water assets, Managing Forestry Operations to Protect Private Water Supplies and the UK Forestry Standard: Fifth Edition (2023). The wood also contains a private water supply to properties in the north, located in compartment 3.

A.6.5 Windthrow
The Detailed Aspect Method of Scoring (DAMS) score ranges from 11 and 13 on the lower slopes and 13 and 15 on the higher elevations. These scores indicate that the ground is well suited to timber production, although windblow may become an issue on poorer soils, or where drainage is compromised.

A.6.6 Adjacent Land Use
To the south and east, Loch Duntelchaig and Loch a Chlachain dominate, although mixtures of commercial conifer, native woodland blocks and rocky hill ground intermix along the shores of Lochs. To the north land use is primarily forestry, with contiguous block of commercial woodland running as far as Daviot. A mix of agricultural fields (grazing) and private dwelling also mix within smaller blocks of woodland until you reach the city of Inverness. To the west, it is primarily Loch Ashie, open moorland and private dwellings that take you to the south shores of Loch Ness

A.6.7 Access
Access to the woodlands is provided via two main access points (one in the north and one to the south), the north being the only one suitable for timber haulage, however, the one in the south can be accessed with a 4x4 vehicle. The internal forest road was extended during the previous LTFP period from compartment 11 into compartment 10 and has been brought up to timber haulage standard allowing good access for timber operations and haulage. It is not thought that there will be a need for any future road extensions to facilitate timber harvesting. The internal road and track network does allow opportunities for walkers, mountain bikers, horse riders etc to travel through the property. The South Loch Ness Access Group have created a 50-mile route that runs along the southern banks of Loch Ness, part of which runs through Easterton and Duntelchaig Wood. Public access will remain fully in line with the Outdoor Access Code.

A.6.8 Historic environment
There are no scheduled monuments within the property boundary. However, there are a number of archaeological features noted on the Highland Council's Historic Environment Record that can be found within or directly adjacent to the estate, which include field systems, hut circles and cairns. The scheduled monument, Clachandruim – three hut circles, is located west of the property but should still be noted. The following table lists known archaeological features that are recorded on Past Map (online database). Their locations are shown on the enclosed Concept Map for reference

Archaeology					
Map I.D.	OS Reference Number	Name	Type	I.D. Reference	Period
1	NH 65396 33698	Creag A' Chlachain	Field System	13204	Unassigned
2	NH 65595 33400	Clach Na Faire	Cairnfield	13202	Unassigned
3	NH 65200 33197	Creag A' Chlachain	Field System	13217	Unassigned
4	NH 65000 32998	Creag A' Chlachain	Field System	13218	Unassigned
5	NH 64780 33200	Cairn Gollan	Cairn	13293	Unassigned
6	NH 65098 32700	Creag A' Chlachain	Hut Circle	13216	Prehistoric
7	NH 64899 32472	Creag Liath	Hut Circle	13298	Prehistoric
8	NH 64853 32390	Stac Dearg	Cairn + Hut Circle	13296	Unasigned + Prehistoric
9	NH 64820 32389	Stac Dearg	Cairn	13297	Unassigned
10	NH 64721 32547	Stac Dearg	Hut Circle	13261	Prehistoric
11	NH 64504 32998	Eastertown	Field System + Hurt Circle	13285	Unassigned + Prehistoric
12	NH 64370 32952	Eastertown	Cairn + Cairn	13292	modern + bronze age
13	NH 64274 32651	Eastertown	Stone	13294	Unassigned
14	NH 64301 32508	Eastertown	Field System	13286	Unassigned
15	NH 64202 32455	Eastertown	Cairn + Stone	13264	Unknown + Unkown
16	NH 64100 32402	Eastertown	Stone	13299	Unassigned
17	NH 64059 32913	Eastertown	Field System + Hut Circle	13280	Prehistoric
18	NH 64629 34196	Clachandruim	Scheduled Monument - Hut Circle	SM11543	Prehistoric
19	NH 64542 34038	Clachandruim	Scheduled Monument - Hut Circle	SM11543	Prehistoric
20	NH 64489 33972	Clachandruim	Scheduled Monument - Hut Circle	SM11543	Prehistoric

As part of any future harvesting operations, a walkover survey prior to harvesting operations will take place and if any unknown features are discovered they will be fully protected in accordance with all legislation and guidance, including The provision of archaeological information and advice in Scotland to meet the UKFS Guidance Note, Identifying the Historic Environment in Scotland's Forests and Woodlands Practise Guide and *UK Forestry Standard: Fifth Edition (2023).* Furthermore, Highland Council's Historic Environment Team will be contacted to document and report findings.

A.6.9 Biodiversity

The woodlands currently represent a diverse mosaic of habitats from young plantation, large blocks of mature plantations and ancient woodland mixed with open ground and hill ground. The woodland helps to support UK Protected Species such as red squirrels and bats.

Within compartments 9 and 13, there is approximately 2.4 hectares of native broadleaved woodland classified as "other" within the Ancient Woodland Inventory, on the Roy map of 1853, within the property boundary. The majority of this is mature birch and oak woodland. These are small fragments but will be managed under a Low Impact Silvicultural System (LISS).

The Loch Ashie SSSI and SPA, designated for its Slavonian Grebes interest, is located to the west but it is not thought that any forest operations would have an impact on this designation.

It is proposed that native woodlands, including areas outlined within Ancient Woodland Inventory, will be manged under a low impact silvicultural system. This will help to create a more complex woodland structure with varying canopy layers over time, benefiting a vast number of associated species. It will also benefit prominent adjacent features such as Loch Duntelchaig, helping to create attractive and prominent landscape features that can be enjoyed by all visitors.

With regards to protected wildlife, this Plan will adhere to Scottish Forestry *guidance on forest operations – Forest Operations and Wildlife Protection and Forest Operations and Birds in Scottish Forests.*

A.6.10 Invasive Species

There are no records of invasive species within the woodland.

A.7 Woodland Description

Provide a brief description of woodland types and any relevant past management.

Also complete the Tables below, with reference to Appendix 2 of the Long Term Forest Plan – Applicant's Guidance.

Easterton and Duntelchaig wood has historically been planted for commercial purposes. Over the last 10 years, restructuring has focused on diversifying age class and species mix as it moved from a first rotation, even aged commercial block. During the previous 10 years 27.01 Ha have been felled and restructured within compartment 1 and 3, with an additional 6.45 Ha in compartment 10 that has been felled but is currently awaiting to be restocked. This leaves 56.31 Ha to be restructured over the next 10 years, leaving the remaining 51.39 Ha to be restructured over the subsequent 10 years. The main commercial species that remain are a mix of Sitka spruce, Scots pine and Japanese larch which have been planted in a mix of pure and intimate mixed blocks. Other species such as Lodgepole pine can be found but in smaller quantities and is of reasonable form. The main planting was carried out in the 1980's.

Compartments 7, 8 and 9 are more variable in terms of species choice and accordingly, has a higher associated amenity value due to the presence of attractive stands of Scots pine, Japanese larch and Sitka spruce with small pockets of open space intermixed. The planting of these compartments also took places in the 1970's.

Across compartments 7, 8, 9, 10, 12 and 13 there are attractive native broadleaves stands that help to break up the commercial planting and create habitat corridors that connect with adjacent native broadleaved areas out with the property boundary. It is mostly birch woodland that is found within the property, however, oak trees are also present, which increases both amenity and wildlife interests.

The current species composition and age structure is shown below.

Table 1 – Area by species

This shows the current and future species composition within the entire Long Term Forest Plan area.

Area by species						
Species	**Current***		**Year 10***		**Year 20***	
(Add relevant species groups, or OG/OL)	**Area (ha)**	**%**	**Area (ha)**	**%**	**Area (ha)**	**%**
Bare ground (to be restocked)	6.47	3.68	0	0	0	0
Douglas fir	0	0	0	0	1.68	0.95
Japanese larch	13.41	7.62	0.22	0.13	0	0
Japanese larch/Sitka spruce	11.87	6.75	8.19	4.66	0	0
Lodgepole pine/Sitka Spruce	7.86	4.47	7.86	4.47	5.80	3.30
Mixed conifer/Native broadleaves	1.52	0.86	1.52	0.86	0	0
Native broadleaves	8.57	4.87	14.65	8.32	19.15	10.89
Native broadleaves/Mixed conifer	0.36	0.20	0.36	0.20	0.36	0.20
Open ground	17.13	9.74	22.11	12.57	23.16	13.16
Scots pine	36.61	20.81	36.48	20.73	44.67	25.39

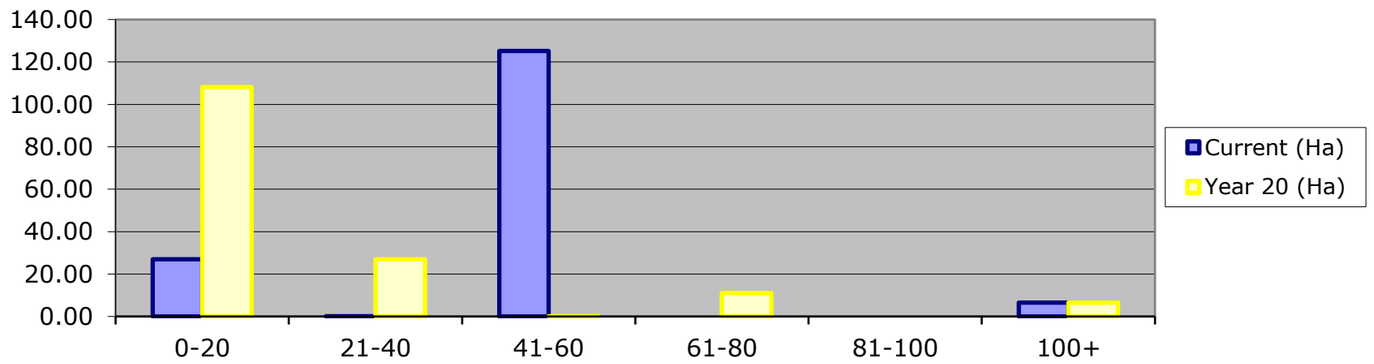
Scots pine/Sitka spruce	7.24	4.11	9.82	5.58	5.68	3.23
Sitka spruce	29.37	16.69	29.37	16.69	33.41	18.98
Sitka spruce/Japanese larch	3.75	2.13	3.75	2.13	0	0
Sitka spruce/Scots pine	31.80	18.07	41.63	23.66	42.05	23.90
Total	**175.96**	**100**	**175.96**	**100**	**175.96**	**100**

- EXCLUDES Other Land (OL)

Table 2 – Area by age

This shows the woodland area broken down by age class and will show how well the woodland is distributed across the age classes. This information can be provided as a chart below. Double click on the chart below and paste your area figures into the spreadsheet that appears.

Age class (years)	Current Area (ha)	Year 20 Area (ha)
0-20	27.01	108.11
21-40	0.10	27.01
41-60	125.18	0.10
61-80	0	11.04
81-100	0	0
100+	6.53	6.53
Total	158.82 (excludes OG/OL)	171.14 (excludes OG/OL)



A.8 Plant Health

Provide details on any known plant health issues within the LTFP area and their effect on the forest plan.

There have been no known plant health issues recorded to date. However, Easterton and Duntelchaig Wood sits within the Risk Reduction Zone 2 for *Phytophthora ramorum*, outlined in the Scottish Forestry *Phytophthora ramourum* Action Plan on larch, Zone 1 being the most at risk and Zone 3 being least at risk. The property currently has 13.41 Ha of pure larch and 11.87 Ha of larch planted in mixtures. Felling these compartments over the plan period and restructuring with disease-resistant conifers, such as Scot pine, will be the focus moving forward.

B. Analysis of Information

B.1 Constraints and Opportunities

Identify constraints and opportunities. Append maps as appropriate and provide map reference.

Factor	Constraint	Opportunity
Access	The forest is open to the public, in line with the Outdoor Access Code. There are no formal access routes, however, there are rides and forest roads that cross the woodland. Operations may be a minor constraint on public access at certain times.	There is no intention of adding additional infrastructure or path networks, however, members of the public will remain welcome and what paths do exist will not be obstructed. Increase of open ground and native broadleaves to improve woodland experience. Don't use deer fencing to protect restocks, instead use deer management to reduce deer numbers to an acceptable level (3-5 deer per km2) where restocks and native broadleaved natural regeneration can establish.
Age Structure	The commercial forest as a whole has a limited age structure at present, with no mid retention stands.	There is an opportunity to restructure the forest over a twenty year period, which will help to diversify the age structure. Managing native broadleaves as LISS, as well as identifying suitable conifer stands for Long Term Retention will also be of benefit.
Timber Resource	Timber quality is reasonable but not exceptional. Forest pests and diseases may impact timber production; threats from present/new pests and diseases brought by change in climate.	Large parts of the woodland resource offer good opportunity for sustainable timber production. Much of the woodland is suited to high yielding Sitka spruce and other diverse conifers such Scots pine and Douglas fir. With regards to *Phytophthora ramorum,* the woodland is in the risk reduction Zone 2. Felling larch stands and restructuring with disease resistant conifers, such as Scots pine, will mitigate against the potential spread of this disease as we move into second and third rotations. Restructuring with intimate mix (50:50) of LP/SS or SS/SP where suitable will help to increase yields over the second retention. Compartment 12 offers good opportunity for good quality, high yielding timber, much of which is currently ready for harvesting. Improving drainage whin compartment 1 during previous plan will aid in improving the yield and timber quality of the second rotation.
Habitats and Species	European Protected Species and other legally protected species may be present within or near to the woodlands, including birds, bats and badgers.	Not using deer fencing to protect restocks will mitigate against the potential for bird strikes or restricting movements of species such as badgers. Use LISS for stands of native broadleaves, which will focus more on non-intervention management but will allow the removal of self-seeded seedlings from non-native

		conifers to be removed where possible. LTR within mature stands of Scots pine in compartment 5 will add to biodiversity and amenity value. Significantly increase native broadleaf cover within compartments 9, 10 and 13 by expanding stands of mature birch woodland that is already present along the edges of the woodland. Opportunity to increase open ground and proportion of native broadleaves in key areas. Increasing open ground in compartment 3 to safeguard water quality for the water supply will also have benefits for biodiversity and removing the conifer edge along the property boundary in compartment 4, restructuring using native broadleaves, will aid with improving edge woodland habitat. Also, key will be identifying mature conifers that would be suitable to manage under long term retentions over the course of the plan – such as Scots pine in compartment 5. UK Forestry Standard 5th Edition (2023) and best practise guidance notes will be followed for all forestry operations, with felling timed to avoid breeding seasons.
Water Environment	Protection must be given to private water supply within compartment 3. Property sits within the Loch Duntelchaig catchment area.	LISS, LTR and Open Ground areas can protect water quality and enhance habitat networks. Managing compartment 5, mature open Scots pine, as LTR with minimal interference will reduce any potential disturbance and impact to the spring that facilitates water supply to neighbouring properties. Additionally, when restructuring compartment 4, commercial Scots pine, removing conifers that have been planted along the edge of the water supply route and restructuring with a 50m buffer of Open Ground, in line with Forestry and Water Know the Rules 2nd Edition, will also safeguard water supply for neighbouring properties. The property sits in the catchment area of Loch Duntelchaig, an important reservoir supplying the city of Inverness. As such its immediate catchment area, including the wood, is designated by SEPA as a drinking water protected area. This means it will be managed according to the best practise laid down in the Water Framework Directive, Guidance Note - Forestry activities around Scottish Water assets, Managing Forestry Operations to Protect Private Water Supplies and the UK Forestry Standard: Fifth Edition (2023). Restructuring of compartments 9, 10 and 13 will remove the conifer edge, which sits along Loch Duntelchaig's northern shore, and restructure using native broadleaves. When felling, crossing points will be bridged with logs to provide access for operations if required.

		Restock design will remove conifers from water edges, instead looking to increase open ground and native broadleaves cover along riparian zones. There is an opportunity to disconnect old drainage systems that run directly into existing watercourses when restocking operations are taking place. This will help to protect the water quality of watercourses found within the site.
Archaeology	There are no scheduled monuments within the forest, but there are a number of identified archaeological features that can be found within or adjacent to the woodland.	All known archaeological sites will be fully protected during any harvesting or subsequent restocking operations, in accordance with all legislation and guidance, including UK Forestry Standard: Fifth Edition (2023). Any other historic features that come to light will be noted to the Local Authority.
Landscape	The woodland in part sits within the Loch Ness and Duntelchaig Local Landscape Area. Species boundary on higher ground on the south slopes of Creag a Chlaichain looks poor in areas where sharp edges and irregular shapes, compartment 7, can be viewed from a number of viewpoints around Loch Duntelchaig.	Use LISS/Long Term Retention to manage the mature native broadleaves and Scots pine within compartments 1, 2, 3, 5, 7, 8, 9, 10, 12 and 13 while managing the majority of conifers under a clearfell system that looks to create smaller felling coupes in the future that will reduce the visual impact of felling. Easterton and Duntelchaig wood is located on the northern, western and southern slopes of Creag a Chlachain, which does make it reasonably prominent within the surrounding area. Through restructuring with appropriate species choice there is an opportunity to rectify some awkward features and margins. These include addressing prominent species boundaries that have created awkward, sharp shapes that are highly noticeable within compartment 7 and geometric conifer edges within compartment 12. Increasing open ground, planting native broadleaves and feathering woodland edges will help to mitigate against the "hard" edge effect that is present, while also helping to promote natural features. All future forest design and operations including felling of coupes and planting operations will be carried out in a sympathetic manner to complement the existing landscape, making use of natural topographical features and soft edges to lessen the visual impact of any future commercial operations. All operations that may impact the visual amenity value of the landscape will involve consultation with the relevant planning authorities, as well as following UK Forestry Standard 5th Edition (2023) and Industry Best Practice. A Visual Landscape Interpretation is included as an appendix (Appendix 13), and highlights the property within the wider landscape, focussing on future felling and species choice for restocking.

Timber Traffic	Approximately 56 hectares of commercial woodland to be felled over the coming 10 year period, estimated to be 10,000 tonnes felled over this period. All timber haulage will enter and exit the property from the north entrance and head north towards Inverness, using the agreed timber transport route. Bunachton Road network is fragile and requires careful planning to safeguard road integrity. The internal forest roads have been brought up to timber haulage standard allowing good access throughout the Estate. It is not thought that additional road construction will be required throughout the Plan period.	Continue to use Timber Transport Management Plans to extract timber along fragile roads in a sustainable manner. Prior communication with Highland Council and neighbouring properties regarding agreeing quotes and timings of felling will help to facilitate with timber haulage and identify any issues prior to felling.
Deer Management	Historically no deer fencing has been used to protect establishing restocks. It is the intention to continue to manage restocks through deer culling than by erecting deer fencing.	Deer numbers, specifically sika deer are relatively high within the surrounding area. However, over the last 5 years there has been a number of clearfell operations on neighbouring property and on Glenfarigaig itself. This has helped to reduce populations of sika deer by removing woodland cover and naturally diverting them away. However, moving forward future deer management will focus on sika hinds in line with NatureScot incentive scheme within the local area. The objective is to maintain deer numbers to a level that allows establishment of trees (planted as well as natural regeneration) without the need for deer fencing. Target for Easterton and Duntelchaig Wood is between 2-5 deer per km2. However, current cull targets are not set at a specific annual number, instead they are in line with reducing browsing pressure on planted restocks, therefore assessed on a much more frequent basis. Assessment is through browsing plot data on restocked blocks and visual analysis of natural regeneration. It is proposed that this will continue going forward, however, there is a desire within the wider area to reduce sika numbers and as such this may factor in future management objectives. Fixed plots (5.6m radius) on newly restocked sites will be used to assess browsing pressure, which will inform cull targets going forward. Unacceptable impacts will trigger an increased cull, targeted at the areas where the impacts are greatest. Deer management can be improved through the restructuring process by providing enhanced open ground and keeping rides open.
Outline how you intend to incorporate the constraints and opportunities into the management objectives.		
To recap, the management objectives are, broadly: amenity, timber and biodiversity.		

Amenity will be improved by the emphasis on creating a forest with a higher degree of diversity, both in species and in structure. Increasing open space and native broadleaved planting adjacent to Loch Duntelchaig will aid with improving the landscape and general appeal of the woodland. Appropriate deer management will allow LISS areas to regenerate, improving the amenity. The landscape can be improved, both internally and externally, through the use of smaller felling coupes, and by removing windblow as and when it occurs.

Maintaining the timber value of the forest will be addressed by taking account of the crop stability constraints, and by retaining the ability to carry out clearfelling, rather than converting the entire forest to LISS. Using mixtures such as Lodgepole pine/Sitka spruce on wetter ground and Sitka spruce/Scots pine on dryer soils will allow for the potential of higher yields to be achieved through the second rotation. Deer populations will continue to be managed, particularly around restocks, in order to maintain timber value. Timber haulage will be required and will following the Round Timber Haulage Code of Practice, as has been done in the past.

Biodiversity can be protected by taking into account the constraints of existing species, and by following appropriate UK Forestry Standard 5th Edition (2023) and legislation (Guidance Notes 32, 35a and 35c). This includes operations carried out near watercourses/waterbodies. There are some areas set aside for LISS which will be of significant benefit to creating a high quality habitat. The long term retention will bring extra habitat benefits for a wide range of species. Deer management can help to establish diverse species and create an understorey within LISS areas.

C. Management Proposals

C.1 Silvicultural Practice

Outline silvicultural practice and management prescriptions. Include any past management practice that is relevant and the strategies to address the issues identified during the analysis phase.

The analysis above shows that Glenfarigaig woodland offer a wide range of benefits to the owners, wider landscape and biodiversity. These benefits can be increased by employing a silvicultural policy as follows:

The silvicultural policy:

- In commercial areas, carry out clearfells over each five year period, initially targeting areas where crop is approaching terminal height and reaching its full economic potential. Also, target larch stands to reduce the risk of *Phytophthora ramorum* infection.
- Use a Low Impact Silvicultural System (LISS) within compartments 1, 2, 7, 8, 9, 10, 12 and 13 (mature native broadleaves). In practice, this is likely to mean selective, small scale thinning where it is thought that the removal of certain trees will encourage natural regeneration and improve habitat quality. This includes the removal of non-native species (where possible) that have naturally regenerated, forming an undesirable understory. Manage appropriate areas of mature conifers as Long Term Retentions (LTRs).
- Restock clearfells with a significant element of Sitka spruce, in order to maintain the commercial value of the forest. Sitka spruce, as a percentage of the total woodland cover, will still be well within the UK Forestry Standard 5th Edition (2023) guidance. Most of the restocked clearfell within the next 10 years will be mixtures of SS/SP, which will improve future yields and will suit the dryer conditions.
- Rem
- Increase open ground from its current level of 9% to just over 13% over the course of the plan. Other open ground opportunities can be found within the moorland and open hill ground that surround the woodland blocks forming edged habitats.
- Improve the age structure of the forest throughout the LTFP period. Long Term Retention areas will by definition help to improve the age structure as native broadleaves and older Scots pine and Norway spruce stands are retained for longer.
- Carry out small operations to improve the amenity value. This may include, for example, planting more specimen trees around informal and formal paths or high prune mature conifers that can be found along the main forest road and entrances.

In general, all forest operations, from the planning stage to implementation, will be undertaken in accordance with accepted industry standards and best practices, particularly those recommended by Scottish Forestry and other statutory agencies. This approach aims to ensure that Easterton and Duntelchaig is managed in a manner that is economically sound,

environmentally sensitive, sustainable, and in sympathy with both adjacent land uses and the local socio-cultural landscape. Diverse woodland is to be preferred wherever possible, not just for landscape or amenity reasons, but as the best form of protection from future pests and diseases. A low impact silvicultural system of management (LISS) is desirable wherever possible, but is not necessarily achievable in all parts of the forest, given past management and the possibility of windblow.

Felling, restocking and thinning proposals are shown in Appendices 7, 8 and 9.

C.2 Prescriptions

Please provide maps as set out in Appendix 2 of the Forest Plan Applicant's Guidance and complete the associated Tables. Provide any further details required along with the map references.

C.2.1 Felling

Clearfelling is required in commercial conifer areas where crop age and stability, past management and need for an economic return indicate that LISS is inappropriate. Within Glenfarigaig Woodland, this means that compartments 4, 11 (part) and 12 will be clearfelled in Phase 1 - compartments 1 (part), 7 (part) and 8 (part) in Phase 2 - compartment 2 (part), 11 (part), 12 (part) and 13 (part) in Phase 3 and compartments 7 (part), 8 (part) and 9 (part) in Phase 4. The choice of particular coupes and felling phase is based primarily on adjacency, windblow damage, poor crop development, terminal height and maximum mean annual increment (MMAI).

It is possible that other areas of the Estate will need to be clearfelled if circumstances change; for instance, if storms inflict significant damage on areas currently designated as being under LISS or LTR. Amendments will be sought from Scottish Forestry where applicable. Where available, windfirm edges form the backbone of all felling coupe designs.

The majority of Phase 1 and 2 felling will look to remove approximately 56 hectares (Phase 1: 30.78 ha Phase 2: 25.53 ha) of even aged, mature Sitka spruce (main component), poor quality Scots pine and Lodgepole pine (interior provenance) and larch.

The majority of Scots pine Lodgepole pine to be felled in compartment 1, 4, 7 and 11 is poor quality and slow growing, however, stands of better quality Sitka spruce, which in some places is starting to become oversized and approaching critical height, will also be restructured. Targeting stands of larch within compartments 4, 7 and 12 will aim to mitigate against the potential introduction of *Phytophthora ramorum* by removing these susceptible stands over the course of 10 year felling approval.

Where possible, all broadleaved trees that are found within felling coupes will be retained in order to maximise biodiversity and habitat potential.

Trained and certified operators will carry out all operations. Health and safety will be paramount in the organisation of the operations and will follow a strict procedure laid out by the Estate and the harvesting company involved. These procedures take into account pollution contingency and control plans and watercourse management issues. Full risk and environmental assessments will be carried out prior to operations being carried out and will be recorded by the Estate.

Risk of pollution and degradation of water quality is to be addressed through the on-site implementation of the *UK Forestry Standard 5th Edition (2023).* Measures recommended by the Guidelines to this effect include site planning to reduce sediment-laden run-off entering watercourses; the use of temporary bridges and plastic pipes wherever watercourses are crossed by machinery; and the timing of operations, the use of brash mats, and the correct choice of machine to minimise ground damage during felling and extraction. All temporary log bridges will be removed following harvesting operations.

The use of a fully mechanical system will be employed wherever possible to increase productivity and obtain the best economic returns from harvesting operations. This system will involve the use of purpose built harvesting and forwarding equipment. These machines will work an organised system of felling and extraction, facilitating the use of the brash to create running mats and therefore reducing ground damage to a minimum.

Where small scale felling is required or where terrain does not allow access by mechanical equipment, motor-manual felling with conversion at stump and forwarder extraction to roadside may be utilised. In practice, as harvester access to most of the productive forest is good, motor-manual felling will generally only be required where oversized tree felling is required or small-scale restructuring or habitat restoration are primary operational objectives.

Accurate and detailed records will be maintained of all harvesting operations, including timber volumes/tonnages and crop break-outs. These will be used as a basis to inform future forecasting from neighbouring coupes, and as part of the process of building the bank of accurate GIS data.

C.2.2 Thinning

No commercial thinning operations are planned over the course of the Long Term Forest Plan.

C.2.3 LISS

Compartments for Long Term Retentions (LISS): 1, 2, 7, 8, 9, 10, 12 & 13

LISS is generally not appropriate in semi-mature or mature unthinned commercial conifer areas, therefore, the majority of the commercial crop is not suitable for LISS management approach. However, the native broadleaved stands could be regarded as LISS because thinning to remove individual trees (potentially non-native conifer species) and opening up stands to increase light levels may be carried out in order to help create a more complex woodland structure with varying canopy layers over time. The aim would be to enhance biodiversity through increasing habitat, stimulate natural regeneration through selective tree removal and increase visual diversity within the wooded landscape. In practice, although no operations are planned, there is potential that LISS can give the flexibility to remove small, non-native conifer regeneration, native broadleaves would not be targeted for removal, in key areas that will enhance and protect key habitats. The aim would be to enhance biodiversity through increasing habitat, stimulate natural regeneration of native species through selective non native tree removal and increase visual diversity within the wooded landscape.

It is thought that intervention to remove non-native conifer natural regeneration, such as Sitka spruce, may focus around the small area of ancient-semi natural woodland near Loch Duntelchaig. Where appropriate, removal of non-native conifers from LISS areas will be identified and removed by motor manual felling.

Trained and certified operators will carry out all operations. Health and safety and environmental protection will be paramount in the organisation of the operations and will follow a strict procedure laid out by Forest Manager and the operators involved. These procedures take into account pollution contingency and control plans and watercourse management issues. Full risk and environmental assessments will be carried out prior to operations being carried out and will be recorded by the Forest Manager.

LISS areas will be monitored on a quarterly basis during routine forest management visits, with visual assessments being the main focus of assessing general health and the spread of non-native natural regeneration. Where young, non-native saplings are recorded the removal process will involve simply pulling by hand. As previously described, larger stems will be removed by motor manual felling.

C.2.4 Long Term Retentions (LTR)

Compartments for Long Term Retentions (LTR): 2, 3, 5 & 9

Some mature stands of mainly Scots pine have been classed as long term retentions (LTR). Compartments 2, 3 and 5 are mature stands of Scots pine and compartment 9 is a mix of mature Scots pine and Sitka. The main areas of LTRs were planted in 1984.

These LTRs are seen as a key component within an overall bid to maintain and improve biodiversity. The expectation is that these woodlands will be managed for the long term, for the benefit of the landscape as well as biodiversity. Small-scale thinning and felling may be carried out to control undesirable regeneration (for example regeneration encroaching into the water supply boundary) and any hazardous trees.

C.2.5 Restocking Proposals / Natural Regeneration

Species Selection

All restocking prescriptions and specifications will be, as a minimum, those laid out in the *UK Forestry Standard: Fifth Edition (2023)*. The following prescriptions outline the methods to be used in meeting the restocking requirements of the Forest Plan.

Species choice in areas that are not to be restocked with the same species as the previous crop will be guided according to the local knowledge and experience, together with the recommendations of the Forestry Commission's Ecological Site Classification (ESC) system.

Appendices 8 (Restock Plan – Year 20) identifies where restocking activities will be undertaken through the duration of the plan and indicates the desired species choice. In some instances, post-harvesting site inspections and subsequent restocking planning may suggest planting of an alternative species. For example, a mix of Sitka spruce/Scots pine may be planted in areas designated for restocking with Lodgepole pine/Sitka spruce, dependent on ground conditions, whereas oak may replace birch if more favourable site conditions are identified after production of this plan. Tolerances given at the end of this Plan outline the amendments for which formal Scottish Forestry approval will be required.

It is expected that mixed conifers with map labelling Sitka spruce/Scots pine will be 50:50 mix, planted in a 3 x 3 formation in line with accepted silvicultural practices. Data shows that planting in mixes can increase yields over the rotation of the final crop species, in this case Sitka spruce. Mixed conifers, highlighted as Scots pine/Sitka spruce will favour Scots pine with a 70:30 mix and will be planted in groups where Scots pine will be targeted on drier podzolic soils and Sitka spruce targeted to wetter gley soils.

"Native Broadleaves" have also been outlined on the restocking map. Similarly, species selection and percentage of each component will only be finalised once felling has been completed, however, it is expected that species such as Silver/Downy birch, Sessile oak, Hazel, Rowan, Aspen, Bird/Wild cherry, Grey willow, Hawthorn and Blackthorn will form the basis of species choice. A percentage of a specific species will be determined through ground conditions after felling, with higher dependency on birch, willow and alder in wetter, less fertile sites. A more diverse species structure will be focused on free draining soils.

Areas of the woodland where commercial timber plantations are neither appropriate nor economically viable will be restocked with native species according to site conditions. Here, guidance will be sought from the ESC system, together with SF Bulletin 112, Creating New Native Woodlands (1994).

Seed zone 201 will be used for all native stock. Where Native Scots pine forms part of the planting mix, Seed Zone 3 (North East) will be used. Should this seed zone be unavailable and adjacent seed zone will be used and SF guidance note followed. Prior to adjacent seed zones, or any other seed being used, Scottish Forestry will be consulted to agree what zone should be used.

Species chosen for timber production purposes will be of suitable commercial provenance and may include genetically improved stock (particularly for Sitka spruce) to maximise financial returns for future timber harvesting. Native broadleaved species will be of local origin wherever possible. Cell grown specifications for conifers will be a minimum of 2+1 and 20-40cm with a minimum root collar diameter of 5mm, in order to reduce the chance of severe damage by *Hylobius abietis*.

Ground Preparation

Typically, the drier the site, the less invasive will be the method of ground preparation used. All operations will be carried out in accordance with the *UK Forestry Standard: Fifth Edition (2023)*. Choice of ground preparation will be site-dependent and influenced by various factors including: soil type; drainage; slope; harvesting residues; species to be planted; proximity to watercourses; and cost.

When restocking after clearfell harvesting, hinge mounding will be the main method chosen across the site, specifically targeting dry/moist areas, so that the benefits they offer in respect of weed management and planting position will be achieved. Hinge mounding is likely to be the most suitable choice for ground preparation for both conifer and native broadleaf establishment. However, ditch-dollop mounding may be required where it is necessary to drain the site as well as provide a planting position. This will be targeted on peaty and gleyed sites and will be used during restocking of particularly wet areas. This type of ground preparation may be required in sections of compartments 2 and 11 where poor growing Scots pine and Lodgepole pine currently sits on relatively flat, wet ground. If required, spoil trenches will be excavated at approximately 16m centres and the spoil from these will be used to create mounds at an appropriate spacing for the species proposed. Brash from harvesting operations will be placed directly onto the ground and will not be placed on brash mats. Spoil drains will not exceed 20m in length. Where practicable brash will be compacted into the spoil drains to leave a clean site. New methods and machines for ground preparation are currently being developed and these will be considered on their own merits for the type of cultivation required.

All ground preparation operations, including the establishment of drains, will be undertaken in accordance with *UK Forestry Standard: Fifth Edition (2023)* and will be assessed at an early stage in recognition of their potential to impinge on adjacent ecologically-sensitive areas.

Drainage will be carried out where necessary to provide an appropriate planting site. Old drainage systems that run directly into watercourses will be identified and disconnected at least 10 metres away from the watercourse. All operations will be carried out in accordance with best practice. Silt traps will be used, and regularly maintained, where there is a high risk of erosion. Drains will not exceed 3.5% (2 degrees) in slope and will be aligned up-valley to maintain an even gradient. Cross-drains will be provided as necessary to control run-off from cultivation channels. Soil is a vital component of forest ecosystems and, as such, the *UK Forestry Standard: Fifth Edition (2023)* will be followed to ensure site management sustainability.

Planting

The designated planting spot will be determined as the most appropriate location to take advantage of the chosen method of ground preparation and prevailing site microclimate. In the area covered by this plan, this is likely to be the centre of a mound.

Where hand planting is undertaken, a V notch will usually be used, making sure roots are spread evenly at the bottom of the slot. Regular inspections of planting will be carried out to ensure high standards are met at all times. Planting operations will be undertaken by trusted contractors who will be inspected regularly to ensure that high standards and operational objectives are achieved (defined as appropriate stocking density; good plant survival rates; proper disposal of waste materials such as planting bags; and completion of operations on time and within budget).

All compartments will be restocked within 2 years of clearfell. Stocking densities will be a minimum 2,500 stems per hectare for conifer and 1,600 stems per hectare for broadleaves. A Beat up operations will be carried out throughout the routine maintenance of new planting sites (typically during years 1 and 3) to bring compartments up to at least the minimum stocking densities by year 5.

Felling of compartment 10 took place during the final year of the previous LTFP (2024) and targeted areas of windblow. In order to allow access for timber extraction to roadside for Phase 1 felling of compartment 13, compartment 10 will be restocked in conjunction with the restocking of compartment 13. This is necessary as compartment 10 stretches along the southern forest road and will block the movement of timber to roadside when felling compartment 13. Compartment 13 is due to be felled 2026 and restocked 2027, which, as previously stated, will include the restocking of compartment 10.

There is an opportunity to increase native broadleaf cover within compartments 9, 10 and 13, extending from the designated ancient semi-natural woodland that runs along the shores of Loch Duntelchaig. This will not only benefit biodiversity and landscape designation, but also will help to mitigate against non-native conifer spread to key habitats by creating and additional barrier to the ancient semi-natural woodland.

A Visual Landscape Interpretation is included as an appendix (Appendix 13), and highlights the property within the wider landscape, focussing on future felling and species choice for restocking.

Table 3 – Felling

This shows the scale of felling within the felling phases in the context of the whole Forest Plan. This includes any areas of 'LISS – Fell' (i.e. removal of final overstorey).

Note: Percentages below are out of the total forest area but exclude open ground.

SCALE OF PROPOSED FELLING AREAS (including LISS final fell areas)		
Total Forest Plan Area:	158.84	hectares

Felling	Phase 1	%	Phase 2	%	Phase 3	%	Phase 4	%	Long Term Retention & Low Impact Silvicultural System	%	Area out-with 20yr plan period	%
Area (Ha)	30.78	19.38	25.53	16.07	30.75	19.36	20.64	13.00	17.68	11.13	33.45	21.07

Table 4 – Thinning

This shows the area of thinning over the first 10 years of the Forest Plan.

Species	**Thinning (ha)**
NBL (LISS)	8.87
Total	**8.87**

* No thinning of commercial blocks is expected to happen over the LTFP period, However, areas managed under LISS (NBL) have been included within Table 4. Only "thinning" that is expected to take place is the removal of individual self-seeded conifers within LISS areas by motor manual felling or hand pulling.

Table 5 – Restocking

This table provides information on the restocking proposals for the first 10 years of your Forest Plan.

Felling Phase	Map Identifier(s)	Species to be planted	Area (ha) to be planted
Felled Previous LTFP	10a1	SS/SP	3.23
Felled Previous LTFP	10b2	NBL	1.01
Felled Previous LTFP	10b3	NBL	0.55
Felled Previous LTFP	10c1	SP	1.32
Felled Previous LTFP	10x1	OG	0.52
Felled Previous LTFP	10x2	OG	0.34
Phase 1	04a1	SP/SS	5.68
Phase 1	04b1	NBL	1.86
Phase 1	04x1	OG	0.97
Phase 1	11b1	NBL	0.88
Phase 1	12a1	SS/SP	9.42
Phase 1	12a2	SS/SP	4.24
Phase 1	12a3	SS/SP	3.01
Phase 1	12a4	SS/SP	0.39
Phase 1	12b2	SP	1.19
Phase 1	12c1	NBL	1.24
Phase 1	12x1	OG	1.90
Phase 2	1b1	SS/SP	5.53
Phase 2	7a1	SP	9.02
Phase 2	7b1	SS/SP	6.62
Phase 2	7c2	NBL	0.54
Phase 2	7x2	OG	1.04
Phase 2	7x5	OG	0.29
Phase 2	7x8	OG	0.12
Phase 2	8a2	SS/SP	1.33
Phase 2	8a3	SS/SP	0.72
Phase 2	8x3	OG	0.18

Phase 2	8x4	OG	0.14
Total Restocking Area	**63.28**		

C.2.6 Protection

All operations within the forest, and all design and planning exercises that underpin such operations, will be designed to minimise the risk of damage from wind, fire, pests and diseases. A Deer Management Plan is given in Appendix 12.

Large pine weevil are likely to pose a threat to young trees for two to four years following felling. To combat this threat larger sized plants will be used (where available) pre-treated with insecticide and a fallow period of two years prior to planting. Top-up applications of approved pesticide will be applied as required until the threat has passed. All chemicals will be used in accordance with the product label, industry best practice and UK Forestry Standard Fifth Edition (2023).

Prompt replanting within two years of felling is considered preferable over leaving sites fallow for extended periods, in order to maximise recovery of the nutrients stored in the brash and needle litter. Following this approach less weeding should be necessary, due to the ground remaining in an unproductive state for a shorter period. However, grasses and flowering herbs will compete with young trees for nutrients, light and moisture in the early years following planting. Regular monitoring will identify the requirement for weeding. Any works undertaken will be by knapsack application using an approved herbicide around each suppressed tree. Where chemical weeding is not appropriate, adjacent to watercourse or other sensitive habitats, hand weeding will take place. Ultimately, the requirement to use chemical treatment for weeds will be based on site monitoring by the Forest Manager: this is to ensure chemical treatment is only undertaken when necessary.

During restocking it is anticipated the main grazing impacts will be from deer, with limited impact from rabbits, hares and voles. Rabbits, if they are seen to pose a risk, will likely be controlled by shooting. Any damage from vole activity will be minimised through appropriate ground preparation and regular weeding.

C.2.7 Fence erection / removal

The Estate carries out deer control by shooting throughout the property. Past management has seen restocked compartments kept free of fencing with shooting being the preferred option of deer control. The same approach will be taken with future restocks, where the use of deer fencing will be avoided where possible. This is expected to be achievable through increased culls when required, targeting restock areas and assessing browsing damage on a frequent basis.

If new deer fences are required, consultation with RSPB will take place to determine if fence markings are required. It is thought that adjacent tree species and land type to new deer fenced areas will determine if marking is required.

Assessment of deer damage to trees (both young and old) will be a key target for annual monitoring, and results will be fed back to both the planning process and the deer controller, in order to allow targets to be re-evaluated on a frequent basis.

There are a number of existing stock fences that bound adjacent agricultural fields, mainly along the western boundary. These fences still have a practical use and there are no current plans to remove fences.

C.2.8 Road Operations

Areas for timber production are accessible by a combination of public road, existing forest roads and tracks.

Consultation with Highland Council will be carried out prior to future large-scale timber haulage (defined as more than 1,000 tonnes).

Forest roads and tracks are identified in the Roading & Timber Haulage Map (Appendix 11). Sections of the internal forest road has been brought up to timber haulage standard allowing good access throughout the Estate. It is not thought that future roading works will be required to facilitate timber haulage, however, if necessary, re-grading works will be undertaken prior to felling operations and will include timber loading bays and turning points where appropriate. If any new roading infrastructure is required, an application to Highland Council for Prior Notification and Approval will be made.

Roadside drains and culverts will be maintained to prevent erosion of the road surface. Surface water will drain into ditches and then into adjacent land without discharging into watercourses. Stone required for resurfacing will be extracted from internal sources wherever possible. Culverts and side drains will be inspected annually. Road vegetation will normally be controlled by mechanical means such as re-grading and flailing.

All timber haulage will leave the property in the north, exiting on to the U1096. A short section of this road is classified as a consultation route, however, it does quickly become an excluded route until it meets the C1064 further north, where it returns once again to a consultation route. As per previous timber sales, consultation with the timber merchant and Highland Council will take place prior to felling. As part of these discussions a Timber Transport Management Plan will be agreed and followed during each felling operation. Going forward, discussions with neighbouring properties and agreeing annual quotas with Highland Council will continue.

Road maintenance contractors will be issued with risk assessments and will be expected to submit their own risk assessments, site safety rules and certificates of competency. The General Permitted Development (Scotland) Order 2014 will apply to any significant improvements or extensions to forest roads. In general, this will be dealt with by an application to the Highland Council for Prior Notification and Approval. Works associated with the replacement of culverts will require to be registered with Scottish Environmental Protection Agency (SEPA) prior to work being carried out.

Extended forest road culverts and bridges should be designed to convey 1:100 storm flow.

C.2.9 Public Access

The internal road and track network does allow opportunities for walkers, mountain bikers, horse riders etc to travel through the property. The South Loch Ness Access Group have created a 50-mile route that runs along the southern banks of Loch Ness, part of which runs through Easterton and Duntelchaig. Public access will remain fully in line with the Outdoor Access Code. In certain circumstances, it may be necessary to arrange a path diversion or even a temporary closure for the safety of the public and workers/contractors, such as when felling trees. All appropriate warning signage and barriers will be installed for operations as deemed necessary, relative to the risk posed by the operation.

Apart from entrance gates, which include pedestrian access gates, there are no current internal deer fences or gates that could potentially hinder access. At present, there is no intention to deer fence future restocks.

There are no plans to put in place any interpretation boards or construct/upgrade paths.

C.2.10 Historic Environment

There are no scheduled monuments within the property boundary. However, there are a number of archaeological features noted on the Highland Council's Historic Environment Record that can be found within or directly adjacent to the estate, which include field systems, hut circles and cairns. The scheduled monument, Clachandruim – three hut circles, is located west of the property but should still be noted. All known archaeological features are shown on Appendix 10 Designations and Features Map.

All known archaeological sites will be fully protected during any harvesting or subsequent restocking operations, in accordance with all legislation and guidance, including *UK Forest Standard: Fifth Edition (2023).*

As part of any future harvesting operations, a walkover survey prior to harvesting operations will take place and if any unknown features are discovered they will be fully protected in accordance with all legislation and guidance, including *UK Forest Standard: Fifth Edition (2023).* Furthermore, Highland Council's Historic Environment Team will be contacted to document and report findings.

C.2.11 Biodiversity
The biodiversity value of Easterton and Duntelchaig Woodland will be further enhanced through this Plan period, by means of the LTR and LISS areas. Leaving deadwood on site, both standing and fallen, during harvesting operations, in line with current *UK Forest Standard: Fifth Edition (2023)* will also create and enhance habitat suited to many species. The property helps to support UK Protected Species such as otters, red squirrels and pipistrelle bats. This Plan will look to increase the woodlands suitability to support species by increasing tree species mix and age diversity, particularly in areas that are to be managed as LISS (native broadleaves) and LTRs (mainly Scots pine). The significant increase in native broadleaved planting, specifically within compartment 9 and 13, will focus on extending native broadleaf cover from the existing ancient semi-natural woodland that covers the shores of Loch Duntelchaig. Additionally, it will create a suitable buffer where the restructured conifer edge will be taken back by approximately 50m from the mature stands of native broadleaves, helping to increase the amenity and biodiversity value. With regard to protected wildlife and bird species, this Plan will adhere to Scottish Forestry guidance on forest operations – Forest Operations and Wildlife Protection and Forest Operations and Birds in Scottish Forests. Natural regeneration within LISS areas is expected to be predominantly native broadleaves. Deer management to reduce deer numbers overall, with emphasise on sika hinds will benefit key habitats. The objective is to maintain deer numbers to a level that allows establishment of trees (planted as well as natural regeneration) without the need for deer fencing and therefore displacing deer onto other ground. The target for Easterton and Duntelchaig is between 2-5 deer per km2. Current cull targets are not set at a specific annual number, instead they are in line with reducing browsing pressure on planted restocks, therefore assessed on a much more frequent basis. This approach has had great success across the property with noticeable increase in natural regeneration of native broadleaves establishing in compartment 1. Assessment is through browsing plot data on restocked blocks and visual analysis of natural regeneration. It is proposed that this will continue going forward, however, there is a desire within the wider area to reduce sika numbers and as such this may factor in future management objectives. Fixed plots (5.6m radius) on newly restocked sites will be used to assess browsing pressure, which will inform cull targets going forward. Plot locations will include conifer areas as well as restructured native broadleaved planting and designated ancient semi-natural woodland. Unacceptable impacts will trigger an increased cull, targeted at the areas where the impacts are greatest. Prior to the commencement of forest operations, such as harvesting, a walkover assessment will take place in order to ascertain the presence of species that may be affected by certain operations such as bird nests, squirrel dreys, otters and badgers. Appropriate mitigation will be put in place to ensure that once recorded, no harm comes to these species. Where required, walkover surveys undertaken by third party ecologists will be commissioned to identify sensitivities such as active badger setts, and work plan developed that conforms to all current guidance and legislation. The most up-to-date Scottish Forestry guidance notes will be adhered to during all forest operations. Any planting near to watercourses will involve scattered broadleaves where appropriate at approximately 50% cover, creating both sun and shade conditions for the burns. Species will be chosen with reference to ESC. Open ground will again form an important element of this woodland type. The relevant guidelines, such as UK Forestry Standard 2023 5th edition, will be central to all forest operations and will prevent damage by siltation or pollution. Fallen and standing deadwood will be retained wherever possible during harvesting operations, in line with UKFS guidance, but safety considerations will always take precedence.

C.2.12 Tree Health
Monitoring of the woodlands will form part of general management duties, with visual inspections carried out during site visits. Part of the visual inspections will look at general indications of tree health. If any concerning signs point to a tree health issue are recorded then the most recent guidance will be followed in relation to the disease in question. New pests and diseases are likely to arrive in Scotland over the next few decades, exacerbated by changes in climate. This Forest Plan recognises that the best strategy for addressing these risks is to create a forest that is diverse in species and structure.

C.2.13 Invasive species

There are no records of *Impatiens glandulifera* or *Fallopia japonica* within the forest, but if they occur the owner will take an active and collaborative approach, wherever possible, in eradicating them. Similarly, *Rhododendron ponticum* has not been recorded within the property but bushes will be removed if bushes are found.

C.2.14 New Planting
None planned.

C.2.15 Other:	Wildfires

Wildfires events are predicted to increase in Scotland due to a number of factors, mainly increased land-use pressures and climate change. Their effects can be devastating on people, property, infrastructure and the environment and therefore careful management planning is required to reduce risks and impacts.

The Forest fire danger index for both 1970 – 2000 and 2070 – 2100 (Forestry Commission Practice Guide) has the Inverness and surrounding area, over both time periods, at a value of 3. A value of 3 keeps the projected fire risk below moderate risk. It should be noted that the risk level is based on climatic factors i.e. periods of prolonged hot and dry periods etc and not anthropogenic factors. The location of Easterton & Duntelchaig in relation to Inverness, approximately 10km to the north/east, and the, although limited, public use of Loch Duntelchaig (specifically wild campers) and the internal estate roads and tracks, does increase the potential for wildfires through accidental or malicious means.

Easterton & Duntelchaig and the surrounding ground has historically been manged under a mix of commercial and native woodland management. Other land-use types that form from woodland edges mainly consist of open moorland and field systems that primarily support sheep and cattle grazing. The combination of land-use on Easterton & Duntelchaig and its surrounding area has generally helped to reduce heathland and moorland vegetation, in turn reducing the risk of fire taking hold and moving quickly through the vegetation layer.

The restock design incorporates open ground within the design to enhance access by creating and retaining rides, safeguarding landscape and protecting key features. However, open ground will also help to act as a fire break between trees/leaf litter and slow the spread of fire especially within areas of more susceptible species such as spruce and Scots pine. Also, areas of other land where rocky ridges/watercourses etc are being protected through no planting will also act as barriers to fire, such as compartment 1 where open ground along a watercourse separates the north and south coupes and creation of additional rides within compartments 12 and 13 which will help to create fire breaks at key points within the forested area.

The planting mix has a high percentage of mixed native broadleaves that will be planted in key areas. These species are more fire resistant compared to spruce and Scots pine and as such will aid in slowing and potentially stopping the spread of fire. Native broadleaves will also be planted along forest edges which will help to create a fire break from potential fires that originate on open moorland within the surrounding area.

The access roads within the forest are of good quality and dissect the forest from north to south, helping to create an additional fire break. Existing ATV access tracks (rough tracks used over a number of years for different land management tasks) and rides will allow further access within the forest to help tackle issues. Helicopter access to open water features such as Loch Duntelchaig would be an option if deemed necessary.

Woodland Insurance is in place and is renewed on an annual basis. It covers fire and public liability. A Fire Plan that details key information and access points will be shared with the local fire officer.

C.3 Environmental Impact Assessment and Permitted Development Notifications

Please indicate the total area (hectares) for each project type and provide details as requested by sensitive or non-sensitive area.					
Type of Project	Sensitive Area		Non-sensitive Area		Total
Afforestation	%Con	%BL	%Con	%BL	ha
Deforestation	%Con	%BL	%Con	%BL	ha
Forest Roads		ha		ha	ha
Quarries		ha		ha	ha
Provide further details on your project if required.					
Not applicable.					

C.4 Tolerance Table

	Map Required (Y/N)	Adjustment to felling period*	Adjustment to felling coupe boundaries**	Timing of Restocking	Changes to Restocking species	Changes to road lines	Designed open ground ***	Windblow Clearance****
FC Approval normally not required	N	Fell date can be moved within 5 year period where separation or other constraints are met	Up to 10% of coupe area	Up to 2 planting seasons after felling	Change within species group e.g. evergreen conifers or broadleaves		Increase by up to 5% of coupe area	
Approval by exchange of email and map	Y		Up to 15% of coupe area	Between 2 and 5 planting seasons after felling subject to the wider forest and habitat structure not being significantly compromised		Additional felling of trees not agreed in plan Departures of more than 60m in either direction from centre line of road	Increase by up to 10% Any reduction in open ground within coupe area	Up to 5 ha
Approval by formal plan amendment may be required	Y	Felling delayed into second or later 5 year period Advance felling into current or 2nd 5 year period	More than 15% of coupe area	More than 5 planting seasons after felling subject to the wider forest and habitat structure not being significantly compromised	Change from specified native species Change between species group	As above, depending on sensitivity	More than 10% of coupe area Colonisation of open areas agreed as critical	More than 5 ha

Note
*Felling sequence must not compromise UKFS in particular felling coupe adjacency. Felling progress and impact will be reviewed against UKFS at 5 year review.
** No more than 1 ha, without consultation with FCS, where the location is defined as 'sensitive' within the Environmental Impact Assessment (Forestry) 1999 Regulations (EIA).
*** Tolerance subject to an overriding maximum of 20% designed open ground.
****Where windblow occurs, FCS must be informed of extent prior to clearance and consulted on clearance of any standing trees.

D. Production Forecast

Append your production forecast.

Appendices

Provide a list of appendices:

Item number	Title
Appendix 1	Location Map
Appendix 2	Scoping Report
Appendix 3	Current Species Map
Appendix 4	Compartment Schedule
Appendix 5	Concept Map
Appendix 6	Felling Map
Appendix 7	Restocking at Year 10
Appendix 8	Restocking at Year 20
Appendix 9	Thinning Map
Appendix 10	Designations & Features Map
Appendix 11	Roading & Timber Haulage Map
Appendix 12	Deer Management Plan
Appendix 13	Visual Interpretation