5. Plan Aims & Objectives

5.1 Issues

- **Most up to date climate models suggest a warming trend over the next 50 years which may impact on species selection now.**
- **New planting will be attractive to browsing by herbivores, especially broadleaves and diverse conifers.**
- **There is a public right of way running through the middle of the site.**
- **Planting within the already established geometric field pattern could create a woodland at odds with its surroundings.**
- **1.4 km of high voltage overhead power lines cross the site.**
- **Access/egress from public road may present safety issues for other road users.**
- **Steep ground and deep soils could lead to excessive soil disturbance during management operations.**

5.2 Key Challenges

- **Planting a mixture of species that will be commercially viable now, and at the end of rotation.**
- **Protecting new planting from herbivore damage.**
- **Maintaining access for members of the public to the site whilst also protecting crops during the early stages of establishment.**
- **Planning coupe shapes and species choice to complement and blend with the surrounding landscape.**
- **Designing safe access/egress for vehicles onto the public road.**
- **Designing internal roading that works around overhead line network for the safety of drivers and machine operators.**
- **Planning for coupe management and machine access to crops from an early stage.**

5.3 Management Aims

5.3.1 Aim 1

Secure carbon sequestration through the growth of high quality timber. – Good soils and low exposure lend themselves to the growing of crops over extended rotations to maximise carbon capture and storage. This is the case both during the lifespan of the tree and also through the longevity of the high value products the trees will go to create.

5.3.2 Aim 2

Production of High quality Timber Crops - The site is well suited to production of high quality timber, including commercial broadleaf and diverse conifer species. Fertile soils across the plan area will make alternatives to Sitka spruce an attractive option and also increase resilience across the National Forests and Land.

5.3.3 Aim 3

Investment in Silvicultural Practices – As a new woodland creation this is a prime opportunity to develop permanent infrastructure to facilitate the ongoing management of this site under the principles of CCF. Investment in permanent machine access networks at an early stage will prove both financially and environmentally beneficial through numerous future thinning and harvesting operations.

5.4 Plan Objectives

- **Ensure the site is safe for drivers and machine operators, and also for users of the public road at access points.**
- **Ensure access to the site is maintained for members of the public.**
- **Design future coupe shapes and crop edges that are sympathetic with the local surroundings.**
- **Improve water quality of the West Bank Burn on FLS land.**
- **Ensure sense of scale is retained when driving along the C414 as it passes through the forest.**
- **Maximise use of steep ground and awkward areas.**

6. Analysis and Concept

6.1 Analysis

Items highlighted in blue are broad aims for the site, driven by national targets and policies.

Objective	Opportunity	Constraint	Concept
Secure carbon sequestration through the growth of high quality timber.	> Good soils will allow the growth of high yield crops. > Products from high quality timber tend to be in use for longer, increasing potential for carbon storage. > CCF management tends towards longer rotations and retentions of over-mature trees as future seed source.	> Exposure at high elevations within the site may result in crop loss through windblow. > Access for regular management operations will be needed to facilitate CCF. > Power lines will impede access to parts of the forest.	> Design shape of commercial conifer and broadleaf coupes around existing constraints on site to ensure workability throughout the full crop rotation. > Plan for permanent forwarder access in these areas to ensure thinning windows are not missed due to operational issues.
Production of high quality timber crops.	> Good soils will allow the growth of high yield crops. > Diverse conifers and commercial broadleaf crops will thrive in site conditions.	> Power lines could hamper access and isolate suitable areas for commercial cropping.	> Follow ESC principles of 'right tree in the right place' to maximise yield of commercial crops.
Investment in silvicultural practices.	> Site conditions are favourable for implementing CCF management.	> Deep soils could be at risk of damage from repeated thinning interventions.	> Design permanent access to coupes to facilitate future management under CCF.
Ensure the site is safe for drivers and machine operators, and also for users of the public road at access points.	> As a currently open site there is scope to design appropriate roading and access from the beginning.	> Power lines need to be crossed to access the majority of the site, regardless of entry point.	> Design road entrance to allow safe access/egress from the site. > Create forest road, with permanent goalposts erected, to access timber stacking/loading areas away from power lines.
Ensure access is maintained for members of the public.	> Current core path is well established. > Opportunity to design network of rides for future recreational access.	> Maintaining access to a new planting site makes it vulnerable to ingress of browsing herbivores.	> Maintain route of core path as integral open space within planting proposal. > Gates in deer fence to have equestrian access fitted. > Maintain network of forest rides to create internal routes for walking and riding.
Design future coupe shapes and crop edges that are sympathetic with the local landscape.	> As a currently open site there is scope to design appropriate crop breaks and edges into the initial planting plan. > Once established, the site has limited visibility from long distances.	> Large scale afforestation on this site will impact the local landscape if not designed sensitively. > Roadside planting runs the risk of creating 'tunnels' if not designed carefully.	> Break up edges of commercial crops with areas of low density broadleaf planting. > Use planting of low level shrubs to soften edges of power line wayleaves. > Keep commercial planting and fence lines back from the public road to maintain the sense of scale.
Ensure water quality flowing into the Loch Leven catchment is maintained.	> As a new planting scheme there is scope to design appropriate riparian zones from the beginning.	> Repeated thinning in CCF coupes runs an increased risk of contaminating water courses if not managed carefully.	> Plant broadleaves along riparian zone to slow runoff from slopes and act as a buffer to commercial conifer crops. > Link broadleaves through to Springhall.
Ensure sense of scale is retained when driving along the C414 as it passes through the forest.	> Opportunity to plant native BL's particularly shrubs along the road would soften the edge without dominating. > Thorny shrub edge may form part of deer disincentive.	> Public road is single track and narrow already. > Conifers planted either side, or deer fence, will feel out of scale to the road.	> Plant shrubs and BL trees along road edge. > Consider setting deer fence back from road edge.
Maximise use of steep ground and awkward areas.	> Soils are good for native BL's.	> Steep ground areas narrowing to a point will be difficult to work > O/H power lines further divide the area for access.	> Plant awkward angled pieces of ground with permanent shrubs or BL trees, as part of framework, as conifers will be difficult to access in future.