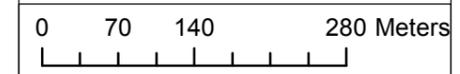
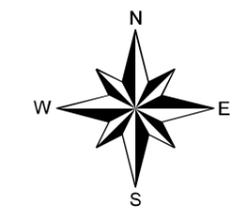


CALENDAR WOOD SILVICULTURAL SYSTEMS

Scale: 6,500 @ A3



01 Oct 2015



Legend

- Callendar_Wood
- UNIFORM SHELTERWOOD
- GROUP SELECTION
- SINGLE TREE SELECTION
- OTHER/OPEN

Long-Term Silvicultural Aims

Conifer – To gradually, over many decades, reduce the proportion of conifer within the wood utilising low impact silvicultural systems in order to eventually restore the woodland to its original ancient state as a woodland dominated by native broadleaved tree species. This will be achieved whilst remaining sensitive to the woodlands more recent 'policy' character which conifers contribute to significantly. Natural regeneration (NR) and/or conifer enrichment will be managed to promote good growth and form to eventually produce quality saw-logs along with secondary log products.

Broadleaves – To encourage and promote the growth, regeneration and spread of existing native species throughout the wood along with other site suitable native species aiming to achieve a woodland diverse in species, structure, character, texture and biodiversity. NR and/or native broadleaf enrichment will be managed to promote good growth and form with clean boles with a view to producing timber suitable for a wider range of niche markets such as those for butts and beams rather than solely for the firewood market.

Group Selection System

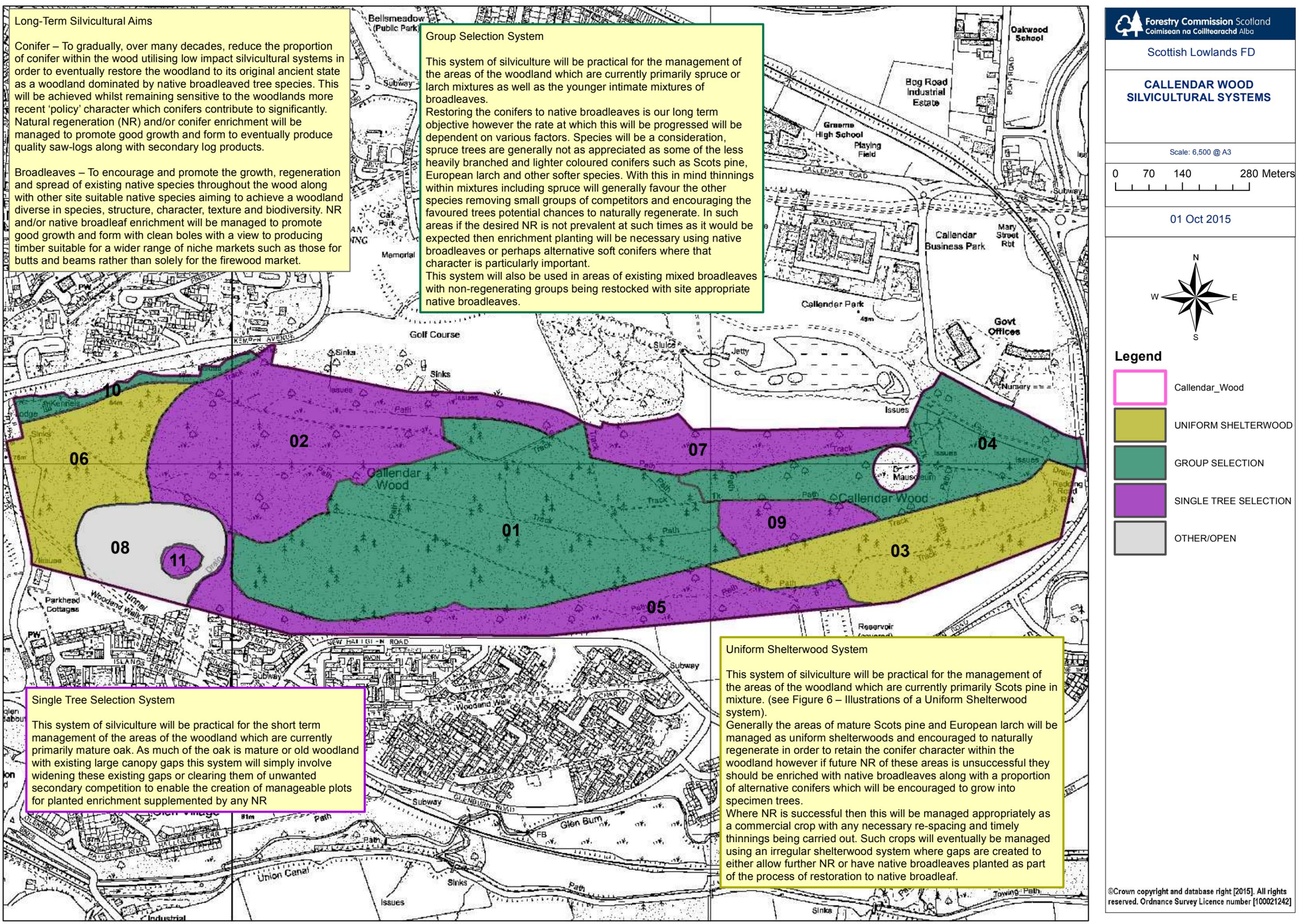
This system of silviculture will be practical for the management of the areas of the woodland which are currently primarily spruce or larch mixtures as well as the younger intimate mixtures of broadleaves. Restoring the conifers to native broadleaves is our long term objective however the rate at which this will be progressed will be dependent on various factors. Species will be a consideration, spruce trees are generally not as appreciated as some of the less heavily branched and lighter coloured conifers such as Scots pine, European larch and other softer species. With this in mind thinnings within mixtures including spruce will generally favour the other species removing small groups of competitors and encouraging the favoured trees potential chances to naturally regenerate. In such areas if the desired NR is not prevalent at such times as it would be expected then enrichment planting will be necessary using native broadleaves or perhaps alternative soft conifers where that character is particularly important. This system will also be used in areas of existing mixed broadleaves with non-regenerating groups being restocked with site appropriate native broadleaves.

Single Tree Selection System

This system of silviculture will be practical for the short term management of the areas of the woodland which are currently primarily mature oak. As much of the oak is mature or old woodland with existing large canopy gaps this system will simply involve widening these existing gaps or clearing them of unwanted secondary competition to enable the creation of manageable plots for planted enrichment supplemented by any NR

Uniform Shelterwood System

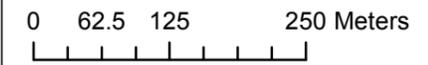
This system of silviculture will be practical for the management of the areas of the woodland which are currently primarily Scots pine in mixture. (see Figure 6 – Illustrations of a Uniform Shelterwood system). Generally the areas of mature Scots pine and European larch will be managed as uniform shelterwoods and encouraged to naturally regenerate in order to retain the conifer character within the woodland however if future NR of these areas is unsuccessful they should be enriched with native broadleaves along with a proportion of alternative conifers which will be encouraged to grow into specimen trees. Where NR is successful then this will be managed appropriately as a commercial crop with any necessary re-spacing and timely thinnings being carried out. Such crops will eventually be managed using an irregular shelterwood system where gaps are created to either allow further NR or have native broadleaves planted as part of the process of restoration to native broadleaf.



CALENDAR WOOD

Thinnings 2015/16

Scale: 6,500 @ A3



04 Jun 2015



Legend

Vehicle Track

Pedestrian Track

Thinning Prescription

- No operations
- Select fell: Sycamore
- Single tree selection - target SYC
- Respacing
- Systematic thin (Rack and matrix)
- Systematic thin (matrix)
- Systematic thin (Matrix: target Spruce)
- Selective thin (Crown thin)
- Selective thin (Crown thin: target SS)
- Selective thin (Crown thin: target NS)
- Selective thin (Low thin: target NS)
- Select fell: Conifers

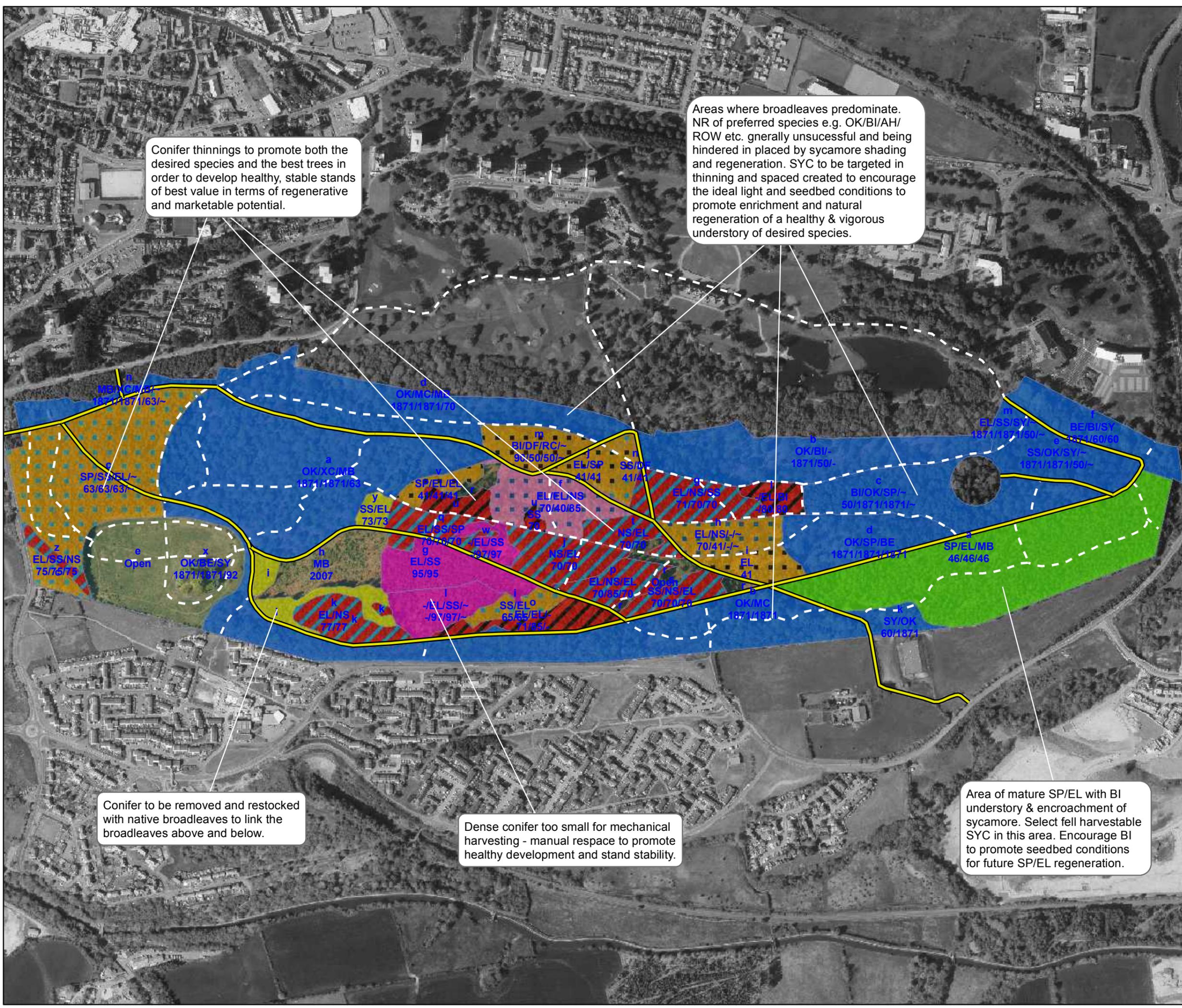
Conifer thinnings to promote both the desired species and the best trees in order to develop healthy, stable stands of best value in terms of regenerative and marketable potential.

Areas where broadleaves predominate. NR of preferred species e.g. OK/BI/AH/ROW etc. generally unsuccessful and being hindered in placed by sycamore shading and regeneration. SYC to be targeted in thinning and spaced created to encourage the ideal light and seedbed conditions to promote enrichment and natural regeneration of a healthy & vigorous understory of desired species.

Conifer to be removed and restocked with native broadleaves to link the broadleaves above and below.

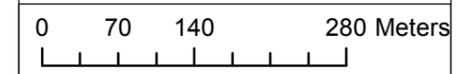
Dense conifer too small for mechanical harvesting - manual respacing to promote healthy development and stand stability.

Area of mature SP/EL with BI understory & encroachment of sycamore. Select fell harvestable SYC in this area. Encourage BI to promote seedbed conditions for future SP/EL regeneration.

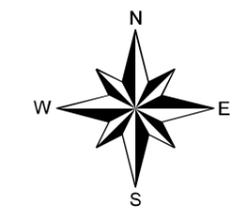


**CALENDAR WOOD
FUTURE HABITATS & SPECIES**

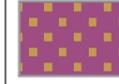
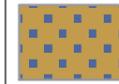
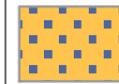
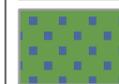
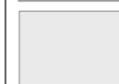
Scale: 6,500 @ A3



01 Oct 2015



Legend

-  Calendar_Wood
-  Oak/Broadleaf
-  Broadleaf
-  Broadleaf/Conifer
-  Larch/Conifer
-  Scots Pine/Larch
-  Scots Pine/Conifer
-  Open
-  Area for FC Approval

Oak/Broadleaf
Within these areas of mature and or old native oak species woodland a series of several enrichment/regeneration plots will be set up. The aim of these plots will be to enable intensive management of relatively small areas to establish any naturally occurring native regeneration or planted enrichment. These roughly circular management plots will typically be around 2 tree lengths in diameter (approx. 30m-40m wide) in order to create areas of sufficient size to allow enough light to promote oak growth as well as being of a size practical enough to facilitate the management of competing ground vegetation such as bracken and bramble.

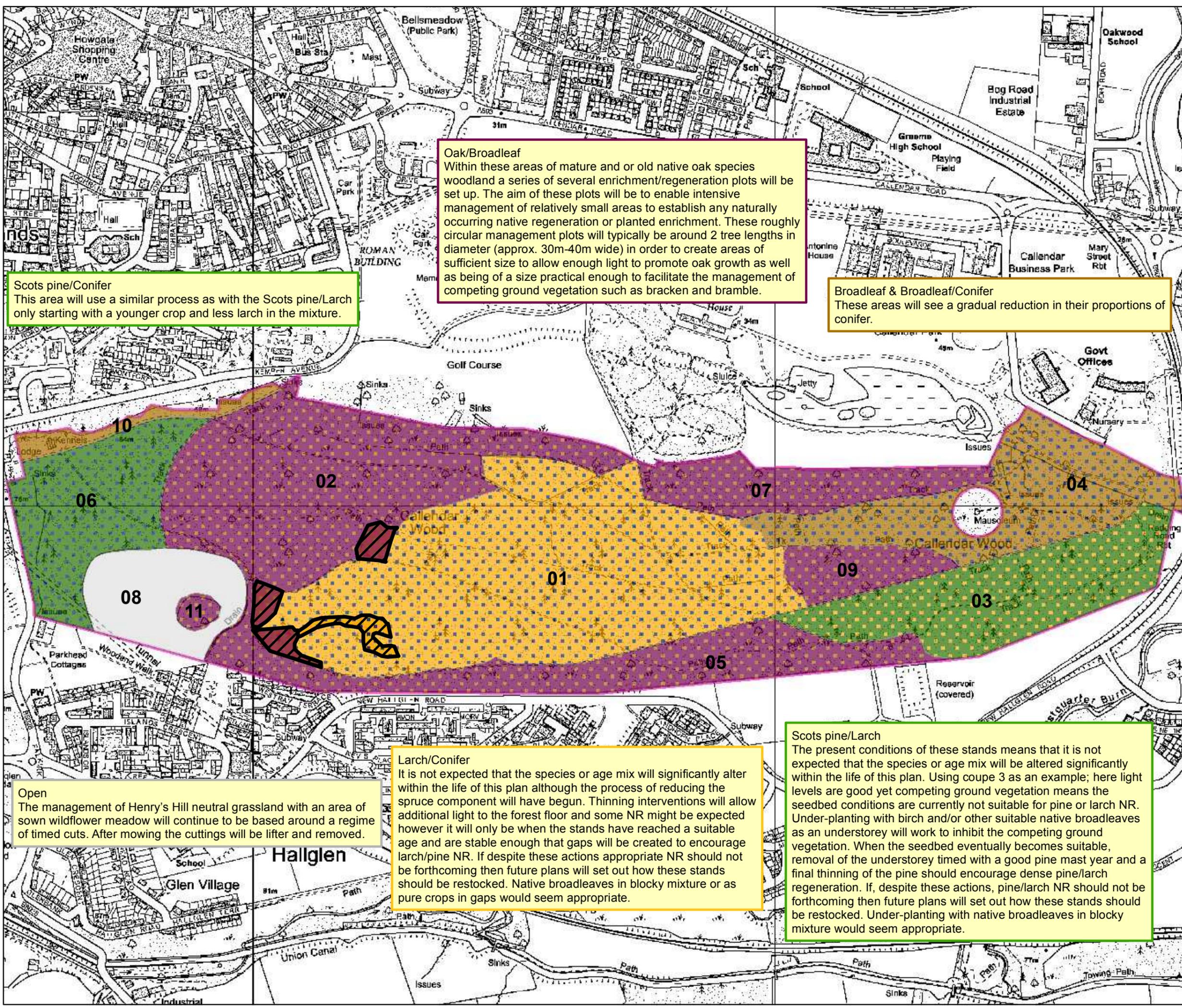
Scots pine/Conifer
This area will use a similar process as with the Scots pine/Larch only starting with a younger crop and less larch in the mixture.

Broadleaf & Broadleaf/Conifer
These areas will see a gradual reduction in their proportions of conifer.

Larch/Conifer
It is not expected that the species or age mix will significantly alter within the life of this plan although the process of reducing the spruce component will have begun. Thinning interventions will allow additional light to the forest floor and some NR might be expected however it will only be when the stands have reached a suitable age and are stable enough that gaps will be created to encourage larch/pine NR. If despite these actions appropriate NR should not be forthcoming then future plans will set out how these stands should be restocked. Native broadleaves in blocky mixture or as pure crops in gaps would seem appropriate.

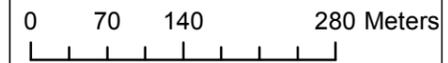
Open
The management of Henry's Hill neutral grassland with an area of sown wildflower meadow will continue to be based around a regime of timed cuts. After mowing the cuttings will be lifter and removed.

Scots pine/Larch
The present conditions of these stands means that it is not expected that the species or age mix will be altered significantly within the life of this plan. Using coupe 3 as an example; here light levels are good yet competing ground vegetation means the seedbed conditions are currently not suitable for pine or larch NR. Under-planting with birch and/or other suitable native broadleaves as an understorey will work to inhibit the competing ground vegetation. When the seedbed eventually becomes suitable, removal of the understorey timed with a good pine mast year and a final thinning of the pine should encourage dense pine/larch regeneration. If, despite these actions, pine/larch NR should not be forthcoming then future plans will set out how these stands should be restocked. Under-planting with native broadleaves in blocky mixture would seem appropriate.



CALENDAR WOOD VISITOR ZONING

Scale: 6,500 @ A3



10 Aug 2015



Legend

Callendar_Wood

Visitor Zoning

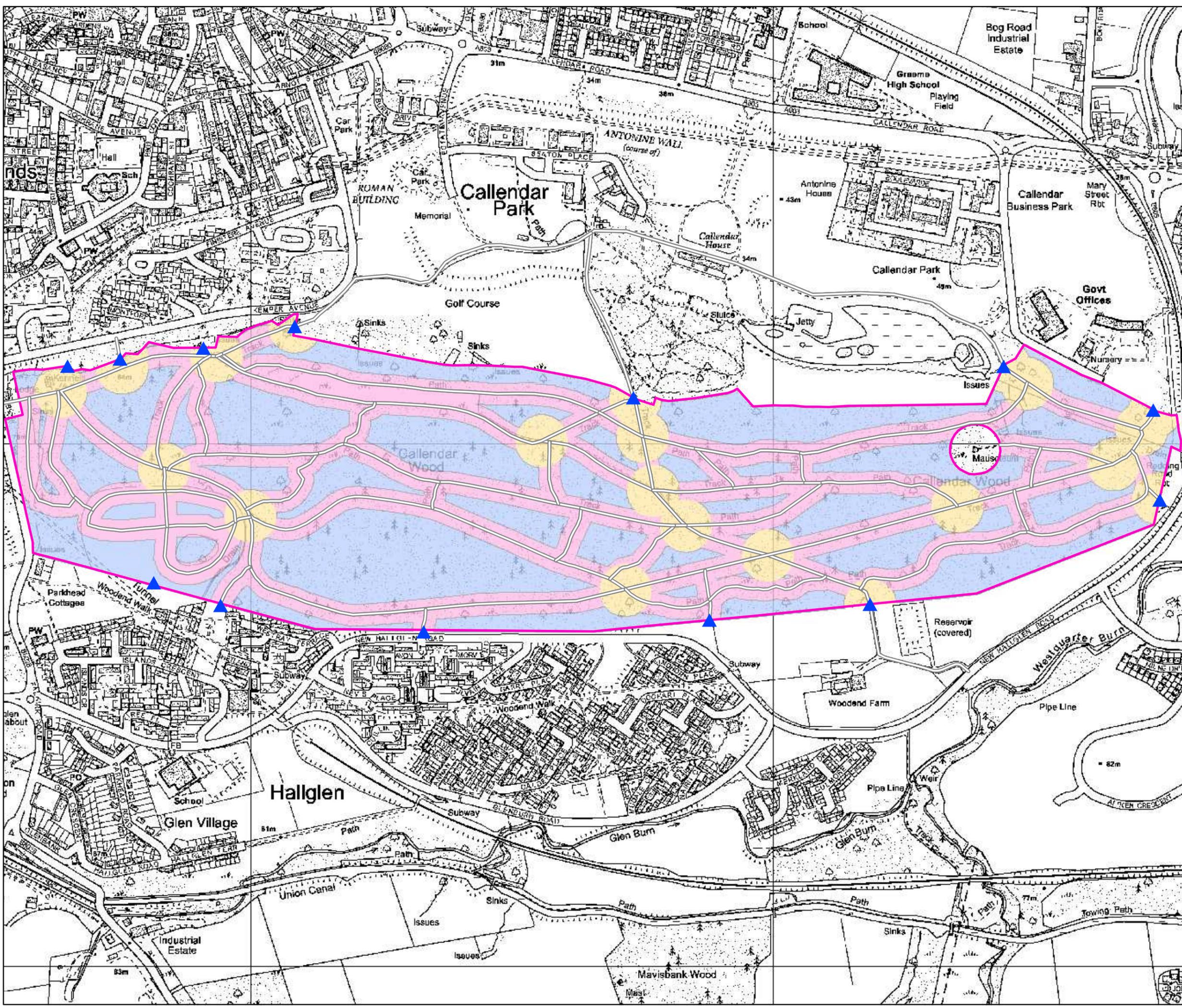
Welcome Management

Interactive Management

Passive Management

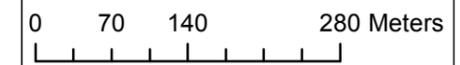
Entrances

Access Network



**CALENDAR WOOD
GENERAL MANAGEMENT**

Scale: 6,500 @ A3



08 Sep 2015



Legend

- Callendar Wood
- Entrances
- Pathside Mowing
- Henry's Hill Grassland



Manage pathside verges

Conserve former estate features such as kennels, boundary wall, mausoleum & observatory.

Manage entrances

Maintain grassland habitat

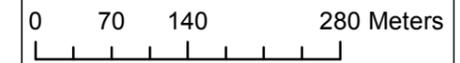
Improve transition between woodland and grassland whilst retaining open character

Retain the view from the High Road from near the Observatory site

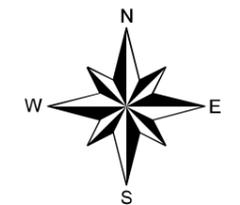
Conserve the iron age fort

**CALENDAR WOOD
POTENTIAL PROJECTS**

Scale: 6,500 @ A3



08 Sep 2015



Legend

-  Callendar Wood
-  Non-FCS Woodland
-  Managed Vista Area

