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| **Option Name:** | **Planting new hedgerows including two protective fences** | | | | | | | | | | | | | | | |
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| **Option Code:** | **PNH** | | | | | | | | | | | | | | | |
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| **Option Payment:** | Year 1: | | £17.63 per m | | | | | | | | | | | | | |
| Year 2 – 5: | | £0.00 per m each year | | | | | | | | | | | | | |
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| **Option Aim(s):** | New hedges fix carbon dioxide in photosynthesis and prevent soil erosion due to flooding. Planting new hedges will also enhance biodiversity and link wildlife habitats, absorb nutrients, enhance the traditional landscape of the countryside, provide shelter for livestock, and reduce nose – to - nose contact between herds which limits the spread of disease. | | | | | | | | | | | | | | | |
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| **Scheme Applicability:** | Wider – EFS(W) | | | | **✓** | | Higher – EFS(H) | | | | | | **✓** | Group – EFS(G) | | **✓** |
|  |  | | | | | | | | |  | |  | | |  | |
| **This option is made up of:** | Annual Management requirements | | | | | | | | | **✓** | | NPI (capital items) | | | **✓** | |
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| **This option is:** | Permanent | | | **✓** | | Rotational | | |  | | | |  | | | |
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| **Option Description and Outcome:** | This Option is a combination of essential non-productive investments (Referred to as capital works) to establish and protect the Option with a range of recurring annual management requirements to ensure retention and maintenance of the Option. Payment for the essential capital works is included in the Option payment rate. A new native species stock-proof hedge with hedgerow trees and two protective fences will be established along an entire length of a boundary or to plant up gaps greater than 10 metres long in existing gappy hedges. For EFS(H) sites, the ‘Planting new hedgerows including two protective fences’ Option is eligible where it will maintain and enhance the carbon sequestration and biodiversity value of these sites and is included in the site specific Remedial Management Plan (ssRMP). | | | | | | | | | | | | | | | |
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| **Choice of site:** | Hedges should be planted in free draining soils. An ideal site is where the previous hedge has been removed in the past or where there is a link with other hedges or habitats. New hedges should not be planted along existing stone walls or hedgerows. This Option can be used along with, but not overlapping with, the “Hedge laying including two protective fences (LAY)” Option to create a dense stock-proof barrier. Any hedge removal, either past or present, associated with the establishment of this Option requires written permission from DAERA through the Landscape Feature Removal Derogation process. Removal of an existing hedge to enable this option to be completed will not normally be permitted. | | | | | | | | | | | | | | | |
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| **Essential capital works:** | Planting the new hedge including planting native hedgerow trees with protection using 1.20 metre tubular or square tree guards and stakes and  erecting two protective fences are considered as essential capital works. | | | | | | | | | | | | | | | |
|  |  | | | | | | | | | | | | | | | |
| **Additional optional capital works available for this Option:** | None | | | | | | | | | | | | | | | |
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| **Length Permitted:** | **Minimum** | 10 m | | | | | | **Maximum** | | | As per max agreement value\* | | | | | |

\* DAERA reserves the right to limit a Higher Level agreement value where it considers appropriate to ensure value for money.

**Requirements and Controls:**

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| --- | --- | --- | --- | --- |
| **Code** | **Non-productive investment requirements (capital works)** | **Control type(1)** | | |
| **Admin** | **CwRS** | **OTSC** |
| **PNH1C** | Complete all capital works required (planting hedge, planting native  hedgerow trees and protection with 1.20 metre tubular or square tree  guards and erecting two protective fences) by 1st June in the first year of the EFS agreement. | **✓** |  | **✓** |
| **PNH2C** | Each individual length of new hedge planted must be a minimum of  10 metres. |  |  | **✓** |
| **PNH3C** | Plant the claimed length of ‘Planting new hedgerows including two  protective fences’ in the field(s) where the Option has been approved. |  | **✓** | **✓** |
| **PNH4C** | Plant at least five native woody plants (one or more species) per  metre length from the hedge species list in Table 1 below. |  |  | **✓** |
| **PNH5C** | Plant native trees selected from the tree species list in Table 2 below  so that there are at least eight trees per 100 metres length of hedge. |  |  | **✓** |
| **PNH6C** | Ensure the native trees are planted to the Specification below and are  at least eight metres apart. |  |  | **✓** |
| **PNH7C** | Erect two protective fences to the Specification below on either side  of the newly planted hedge in the field(s) where the Option has been  approved. | **✓** | **✓** | **✓** |
| **PNH8C** | Protect each newly planted native tree with a new 1.20 metre tubular  or square tree guard and stake to the Specification below. |  |  | **✓** |

(1) The possible control types for each requirement may be:

‘Admin’ – administrative checks, ‘CwRS’ – Control with Remote Sensing, ‘OTSC’ – On-the-Spot Check.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Code** | **Annual management requirements** | Control type(**1)** | | |
| **Admin** | **CwRS** | **OTSC** |
| **PNH1M** | Retain and manage the same linear length and location of ‘Planting  new hedgerows including two protective fences’ for the duration of  the EFS agreement. |  | **✓** | **✓** |
| **PNH2M** | Do not cut back hedgerow trees |  | **✓** | **✓** |
| **PNH3M** | Control weeds to ensure a dense hedge establishes. |  |  | **✓** |
| **PNH4M** | The ‘Planting new hedgerows including two protective fences’ option must be established, retained and managed as detailed in the ssRMP for EFS(H) sites. | **✓** |  | **✓** |
| **PNH5M** | Field records must be kept detailing length completed, location,  date(s) completed and all Management Requirements including  Integrated Pest Management (IPM) requirements. | **✓** |  | **✓** |

(1) The possible control types for each requirement may be:

‘Admin’ – administrative checks, ‘CwRS’ – Control with Remote Sensing, ‘OTSC’ – On-the-Spot Check

**Specification for native tree planting:**

‘Native tree whip’ must be:

• suitable native species (see Table 2).

• protected from grazing livestock.

• successfully established; and

• planted and maintained as detailed in the ssRMP for EFS(H) sites.

**Specification for ‘Stock proof fencing’:**

* All remnant fence material must be removed before erecting the ‘Stock- proof fencing’.
* New materials must be used for ‘Stock-proof fencing’.
* The fence must be erected to BS 1722-2:2006.
* The minimum standard for ‘Stock-proof fencing’ is galvanised woven wire and three strands line wire **or** five strands line wire.
* The overall height of the fence must be at least 1.20 m from the ground to the top wire.
* Straining posts must be equivalent in strength and durability to 125 mm top diameter round timber or 125 mm x 125 mm sawn timbers.
* Straining posts must be set at centres not exceeding 150 m or at each change in direction or gradient.
* Struts must be equivalent in strength and durability to 75 mm top diameter round timber or 75 mm x 75 mm sawn timber.
* Struts must be mortised into the straining post.
* Intermediate posts must be equivalent in strength and durability to 75 mm top diameter round timber or 75 mm x 75 mm sawn timber and set at centres not exceeding 3.00 m.
* Intermediate wooden posts must be at least 1.83 m long.
* All posts must be free of bark.
* Posts must have a potential minimum 15 year life, clearly indicated on manufacturer’s literature/invoice or on application of a subsequent treatment again clearly indicated on manufacturer’s literature/invoice. Where wooden posts have been treated with a preservative, this must have been applied by the manufacturer.
* Use strands of galvanised 4 mm mild plain steel wire or 2.5 mm barbed wire.
* The ‘Stock-proof fencing’ must be properly strained and secured to posts with galvanised staples or appropriate fastenings (such as galvanised wire or bespoke fasteners).
* ‘Stock-proof fencing’ must be erected as detailed in the ssRMP, for EFS(H) sites.

**Specification for ‘1.2 m tubular tree guard and stake’:**

The ‘1.2 m tubular tree guard and stake’ must:

* be at least 1.20 m high and 80 -100 mm diameter.
* have stakes which are a minimum of 1.20 cm x 1.20 cm x 1.20 m long and are free of

bark, tanalised or treated with an approved preservative; and

* be erected and maintained as detailed in the ssRMP for EFS(H) sites

**Plant Health:**

Experience of diseases like *Chalara* dieback in ash and *Phytophthora ramorum* in larch has highlighted the impact that introduced plant pests and diseases can have on the environment. When sourcing plants for planting, reduce the risk of introducing or spreading plant pests and diseases by sourcing from within a reputable supply chain.

Further information on plant and tree health is available on the DAERA website at:

www.daera-ni.gov.uk/topics/plant-and-tree-health

**Further Advice**

If you intend to complete this option on a march boundary, you should ensure that you have

fully discussed and agreed that you can carry out the option requirements and controls on

the march boundary with the person who has control of the neighbouring land.

Only plant the length of hedge that can be looked after up to the maximum length for the

Option. Plant hedges between November and mid-March, the dormant season. Do not

plant hedges in waterlogged or frozen soils. Do not plant hedges on top of stony earth

banks – there is a high probability that the plants will die from drought.

Diagram, engineering drawing

Description automatically generated

**It is recommended that you:**

* plant five native species in each 30 metre length of hedge with a 75% hawthorn: 25% other woody species mix planted along the length of the hedge.
* plant in a staggered row formation; and
* look at the native species growing in the locality as a guide to species selection.

A more stock-proof hedge will establish if seven or eight plants per metre are used, planted

as a double staggered row. If it is intended to lay the hedge in the future, stems of the

hedge plants should not be pruned back after planting.

Plant hedges to link with other habitats, for example, other hedgerows/woodland. As the

new hedge grows, trim to an A-shape two metres wide at the base and two to three metres

tall.

Weed control should be carried out prior to planting. Use mulch, for example, plastic sheet or

bark chippings or an approved herbicide to control weed growth in the newly planted hedge.

As well as mulches/herbicide, hand weeding is essential for successful hedge establishment.

Approved herbicides/pesticides may only be applied to the area of ‘Planting new hedgerows

including two protective fences’ if justified as part of the implementation of IPM, including for

the control of noxious weeds or invasive species by spot spraying of an approved herbicide.

Do not plant beech, horse chestnut, lime or sycamore as hedgerow trees as these will shade

out the hedge underneath (these are not included in Table 2 below). The use of tree guards

and stakes helps identify the location of the hedgerow trees and prevents them being

trimmed off during hedge cutting. Spiral tree guards must not be used.

‘Native tree whips’ should not be planted beneath or within 20 metres of overhead power

lines, or other overhead and underground services, close to buildings or where they would

interfere with future farm development.

‘Native tree whips’ should not be planted near roadsides, at lane or road junctions where the

line of vision could be obstructed.

Planting guidelines:

1. Keep ‘Native tree whips’ roots moist at all times.
2. Make the planting hole big enough for the tree roots.
3. Plant ‘Native tree whips’ at the same depth at which they were growing in the nursery, shown by a lighter soil mark on the stem close to the roots.
4. Plant ‘Native tree whips’ with the stems upright.
5. Firm the soil around the plants by treading it well with your heel.
6. During prolonged dry spells, ‘Native tree whips’ may require watering.

For stock-proof fencing, straining posts should be at least 2.10 m long when not set in

concrete and at least 1.87 m long when set in concrete. Struts should be set at least 450

mm into the ground. To allow for future adjustments and to prevent damage to the

galvanising, staples should be driven in at an angle, but not fully home. Do not attach the

‘Stock-proof fencing’ to trees, hedgerows or electricity poles and do not block or restrict

rights of way. Leave at least one metre between the fence and the centre of the hedge –

protective fences should be about two metres apart.

To allow for future adjustments and to prevent damage to the galvanising, staples should be

driven in at an angle, but not fully home. Do not attach the ‘Stock-proof fencing’ to trees,

hedgerows or electricity poles and do not block or restrict rights of way. Leave at least one

metre between the fence and the centre of the hedge – protective fences should be about

two metres apart.

Approval should be sought from DFI TransportNI before this Option is carried out along a

roadway.

**Table 2: Tree species for ‘Planting new hedgerows including two protective fences**

|  |  |
| --- | --- |
| Aspen | Hazel |
| Crab Apple | Birch |
| Wild pear | Oak |
| Wild Plum / Damson | Juniper |
| Wild Cherry | Rowan |
| Bird Cherry | Whitebeam |
| Wych Elm | Holly |
| Willow | Scots Pine |
| Alder |

|  |  |
| --- | --- |
| Hawthorn | Dog Rose |
| Hazel | Guelder Rose |
| Blackthorn / Sloe | Spindle |
| Holly | Fuchsia *(only plant where fuchsia is traditionally found in the locality)* |
| Gorse / Whin |