

## BOW17.1451: Crow Wood Solar Array – Hedgerow Specification

### Introduction

The following Hedgerow Specification has been produced for and on behalf of Kirkwells Planning Consultant to discharge pre-commencement Planning Condition 11 requested by Burnley Borough Council (Planning Application No. FUL/2023/0332). The application is for the proposed erection of a solar farm comprising 1978 panels, transformer housing, CCTV and boundary fencing (central NGR: SD 83095 34205). Condition 11 is worded as follows:

*“Detailed specification of the native hedgerow (refer to drawing 1503 – 2B) shall be submitted and approved in writing by the Local Planning Authority. The hedgerow shall be put in place in the first planting season. All planted materials shall be maintained for five years and any trees or plants removed, dying, being severely damaged or becoming seriously diseased within 5 years of planting shall be replaced with others of similar size and species to those originally required to be planted.*

*Reason: To ensure that the appearance of the development is satisfactory.”*

Bowland Ecology undertook a Preliminary Ecological Appraisal (PEA) to inform the proposals. The PEA established that there are no existing hedgerows on site. Hedgerows provide sheltering / foraging / commuting opportunities and habitat connectivity for a range of wildlife. As such the inclusion of the approximate 170 m length of hedgerow within the scheme provides the opportunity to enhance the site’s value for biodiversity. This specification outlines features to optimise the creation of the proposed hedgerow for wildlife.

### Hedgerow Specification

The following recommendations seek to maximise value of the scheme’s proposed hedgerow and enhance its suitability for use by a range of wildlife.

- Species - at least four native woody species should be included within each 30 m of the hedgerow. This will ensure the hedgerow is considered native species-rich<sup>1</sup>.
- Species - woody species selected for use within the hedgerow should be of suitable native and of local provenance originating from seed zone 302<sup>2</sup>. A suitable mix of woody species may be composed of an approximate 50% mix of hawthorn (*Crataegus monogyna*) and blackthorn (*Prunus spinosa*) with a selection of other species from seed zone 302 which provide value to wildlife, such as alder (*Alnus glutinosa*), crab apple (*Malus sylvestris ssp sylvestris*), aspen (*Populus tremula*), downy birch (*Betula pubescens*), silver birch (*Betula pendula*), bird cherry (*Prunus padus*), wild cherry (*Prunus avium*), wych elm (*Ulmus glabra*), small-leaved lime (*Tilia cordata*) large-leaved lime (*Tilia platyphyllos*), field maple (*Acer campestre*), English oak (*Quercus robur*),

<sup>1</sup> Four native woody species per 30 m of hedgerow are required to consider the hedgerow species-rich in the north of England.

<sup>2</sup> Seed zones are a non-statutory sub-division of the statutory Regions of Provenance.

sessile oak (*Quercus petraea*), black poplar (*Populus nigra* var. *betulifolia*), grey poplar (*Populus canescens*), rowan (*Sorbus aucuparia*), service tree (*Sorbus torminalis*), whitebeam (*Sorbus aria sensu lato*), willow, crack (*Salix fragilis*), willow, goat (*Salix caprea*), willow, white (*Salix alba*), yew (*Taxus baccata*), broom (*Cytisus scoparius*), buckthorn, alder (*Frangula alnus*), buckthorn, purging (*Rhamnus catharticus*), dogwood (*Cornus sanguinea*), elder (*Sambucus nigra*), gorse (*Ulex europaeus*), guelder rose (*Viburnum opulus*), hazel (*Corylus avellana*), holly (*Ilex aquifolium*), juniper (*Juniperus communis*), privet (*Ligustrum vulgare*), rose, dog (*Rosa canina*), rose, field (*Rosa arvensis*), spindle (*Euonymus europaeus*), wayfaring tree (*Viburnum lantana*) and willow, grey (*Salix cinerea*).

- Spacing - when planting the hedgerow sufficient room between the deer fencing and base of the hedgerow should be provided to allow the hedgerow to grow. A total minimum width of 2 m for the hedgerow should be allowed (woody species planted at least 1 m from the deer fencing).
- Spacing - a single rowed hedgerow is considered sufficient to provide opportunities for wildlife within the scheme. Within a single rowed hedgerow Individual trees should be spaced approximately 45 cm apart to allow sufficient room for each specimen to grow.
- Timing - hedgerows are best planted in autumn, as such the scheme should seek to plant the hedgerow within the autumn season.
- Maintenance - as per condition 11 outlined above - the hedgerow shall be put in place in the first planting season. All planted materials shall be maintained for five years, and any trees or plants removed, dying, being severely damaged or becoming seriously diseased within 5 years of planting shall be replaced with others of similar size and species to those originally required to be planted.

## Conclusion

The inclusion of the approximate 170 m length of hedgerow within the scheme provides the opportunity to enhance the site's value for biodiversity. To maximise the value of the proposed hedgerow and enhance its suitability for use by a range of wildlife a suitable mix of native woody species should be selected and the hedgerow given sufficient space to grow, and specimens planted sufficiently apart. The hedgerow should be planted within the first season targeting the autumn season for optimal planting window and should be maintained as per condition 11 for period of five years.

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## References:

BOW17\_1451 Crow Road Solar Array PEA\_June 2023\_FINAL – Bowland Ecology 2023.

*Hedging A Practical Handbook* – Alan Brooks & Elizabeth Agate – BTCV – 1998.

*Using Local Stock for Planting Native Trees and Shrubs – Practice Note* – R. Herbert, S. Samuel, G. Patterson. – 1999.