



## Works to Propagate, Supply and Apply Endemic Sphagnum for use on Fenn's, Whixall & Bettisfield Mosses NNR

Please note that the terms and conditions as detailed in Natural England's Peat Bog restoration Framework Agreement (NCS\_22468) will apply to this call off Contract.

### FROM

|                        |  |
|------------------------|--|
| Authority              | Natural England  |
| Address                | Room 101, Foss House, Kings Pool, 1-2 Peasholme Green, York YO1 7PX                            |
| Contact Ref:           | Ref: Project 26400<br>Name: [REDACTED]<br>Phone: [REDACTED]<br>E-mail: [REDACTED]@Defra.Gov.uk |
| Bravo Reference Number | ECM_56225<br><i>[To be quoted on all correspondence relating to this Order]</i>                |
| Contract Start Date    | 1 <sup>st</sup> August 2019  |

### TO

|                   |   |
|-------------------|---|
| Contractor        | Micropropagation Services   |
| For attention of: | Name: [REDACTED]<br>Phone: 01509 [REDACTED]<br>E-mail: [REDACTED]@microprop.co.uk |
| Address           | East Leake<br>Loughborough<br>Leicestershire<br>LE12 6PE                          |

### 1. SERVICES REQUIREMENTS

#### (1.1) Services [and deliverables] required:

Specification for Propagating Endemic Sphagnum Species to be used in the restoration of Fenn's, Whixall & Bettisfield Mosses National Nature Reserve, Shropshire & Wrexham.

#### SPECIFICATION

#### ATTACHMENTS

Annex 1      Location map

Annex 2 C7 Bunding Wakeling's & SWT SE fields Sphagnum gel & hummock Map

Annex 3 C7 Bunding bungalow fields Sphagnum gel and hummock Map

## **LOCATION & the Marches Mosses BogLIFE Project**

- Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses are a complex of Lowland Raised Bogs totalling approximately 948ha. They are located about 4 miles south-west of Whitchurch in Shropshire and about 10 miles south of Wrexham. **Annex 1**
- The Marches Mosses BogLIFE project (LIFE15 NAT/UK/000786) is a five year project running from 1 October 2016 to 31 December 2021. The project aims to restore Britain's 3rd largest lowland raised bog within the Fenn's, Whixall & Bettisfield Mosses and Wem Moss NNRs near Whitchurch, Shropshire and Wrexham in Wales. The LIFE project is led by Natural England working in partnership with Natural Resources Wales and the Shropshire Wildlife Trust. The project is financially supported by LIFE, a financial instrument of the European Commission and the Heritage Lottery Fund.

### **1.1 The Work**

- Sufficient Sphagnum of specified species obtained from the Fenn's NNR is required to be able to reseed **3.23 ha** of stripped fields (Annex 2 and 3 {5 plot areas}) in 2019/20.
- 5 field parcels on the Moss are to be restored to bog, see Annex 2 and Annex 3 (turf areas). These are referred to as the Bungalow fields, SWT SE field and Wakeling's field and these will be turfed stripped. This tender is to produce sufficient Sphagnum for the restoration of the field areas shown in Annex 2 and 3.
- Quotations are requested for the production of **Beadagel2** at 100,150, 200 or 300 ml/m<sup>2</sup> (1000-3000l/ha) to cover **1.0 ha** of the field restoration areas shown, for expected use in late summer/early autumn 2019 and for the production of **Beadahumoks** at 4/m<sup>2</sup> to 6/m<sup>2</sup> (40,000-60,000 per hectare) to cover **2.32 ha** of the field restoration areas shown, for expected use in late summer/early autumn 2019.
- Because of the variation in soil pH some areas need to be sown with a '**bog mix**' and some areas need to be sown with a '**fen mix**'. See Section 3.1 for the species details of each of the two mixes required. 1 ha of Beadagel2 and 1.72 ha Beadahumok is required as **bog mix**. 0.6 ha is required as the **fen mix**.
- In addition there is a requirement to photographically record and produce a short report on their production.

- 1.2** Quotations are also requested for the giving advice on and supervision of nurse crop, fertiliser and mulch application by NE and for applying the Beadagel and Beadahumoks using methods agreed in advance

## **2 SITE INFORMATION**

### **2.1 Ground conditions, Areas, Peat Depths and PHs**

- The field areas support peat between 1.5m and 3m depth. Peat acidity in the fields varies between pH5.2 and 6.2 just below the vegetation and pH5.2 and 6.3 15 cm lower. Turf may be able to be stripped off to lower depths to reveal more acidic peat. The acidity of ditch water which may be channelled into the sites to assist re-wetting is ca pH3.8 for Bungalow fields, and pH4.2 for Wakeling's field.

## 2.2 Drainage

- The fields shown in Annex 2 and 3 have been extensively drained for agriculture since 1886, leading to the degradation of the lowland raised bog habitat. They may have been ploughed and reseeded or under-drained. Water may be able to be channelled onto stripped fields from adjacent ditches which carry acidic water off the Moss. Any drainage will have been blocked /areas bunded, before the Sphagnum is spread.

## 2.3 Rainfall

- Rainfall at Fenn's NNR is around 761mm per year (based on a 23yr average). Anecdotal observations reveals that rainfall patterns in recent years have changed from persistent light rain with occasional heavy showers to a pattern dominated by heavy downpours in short bouts. Monthly rainfall is fairly evenly spread, with some degree of autumn increase. The monthly rainfall averages based on the last 23 years for Whixall is<sup>1</sup>:

Local rainfall data from Natural England

| Month | J  | F  | M  | A  | M  | J  | J  | A  | S  | O  | N  | D  |
|-------|----|----|----|----|----|----|----|----|----|----|----|----|
| mm    | 68 | 53 | 48 | 55 | 62 | 63 | 60 | 65 | 61 | 80 | 71 | 74 |

## 2.4 Vegetation

- The vegetation on the fields shown in Annex 2 and 3 are secondary semi-improved rushy pastures generally with a thick thatch. Some fields have been unmanaged for many years and are rank with a dense thatch.

## 2.5 Access – Annex 2 and 3

- Annex 3 shows access points for the fields.  
To access Bungalow fields, park road vehicles at the end of the track leading west from Morris's Bridge along the north of the canal, then walk up the flooded track leading north onto the Moss. Better access for low ground pressure machinery will be prepared prior to spreading the bogmoss.
- For Wakeling's field 21 and SWT SE Field (Annex 2) road vehicle access will be across Morris's bridge then up the track leading north, parking at the field entrance.

Once on the fields low ground pressure vehicles will be needed, supplied by NE.

## 3 OUTPUTS

### 3.1 Beadagel and Beadahumok Sphagnum Propagation

#### ➤ Framework category – 4.1.1

- Within this project Natural England will look for the supply of Sphagnum which will not damage the small areas of intact bog left on Fenn's NNR. Sample material has already been sourced from Fenn's NNR for the Sphagnum species listed below, and has already been cleaned up. No further material should be required unless further quantities are subsequently required.

Under this contract, for the fields, very small quantities approx. 10-20 strands each of the species listed below, sourced from Fenn's NNR will be cleaned, grown on sterile to yield large

quantities and then encapsulated in a water gel coat to give propagules such as BeadaGel™, developed by Micropropagation (EM) Ltd. In 2019 the Beadagel will then be supplied and 'sown' into the prepared bare surface. This order will include the costs of delivery of the Beadagel to site and its production and retention by the manufacturer until required.

Under this contract the species listed below, sourced from Fenn's NNR will be cleaned, chopped up, grown on sterile to form sphagnum such as BeadaHumok™ developed by Micropropagation (EM) Ltd. In late 2019 (or mid 2020 if problems arise with the trials in 2019 or the bulking up of the Sphagna) the BeadaHumok™ will be supplied, delivered and inserted into the trial areas.

- Micropropagation (EM) Ltd has cleaned samples of the following Sphagna from Fenn's NNR: Sphagnum angustifolium, S. capillifolium, S. fallax, S. palustre and S. russowii, S. cuspidatum, S. fimbriatum, S. Magellanicum, S. papillosum and S. tenellum.
- 'Fen Mix' - Because of the higher pH of the fields, the required species mix for the Beadagel and Beadahumok will be:
  - 20% S palustre
  - 20% S fallax
  - 15% S fimbriatum
  - 10% S angustifolium
  - 10% S russowii
  - 10% S subnitens
  - 5% S capillifolium
  - 5% S papillosum
  - 5% S cuspidatum
- 'Bog Mix'- For the more acidic areas, the required mix for the BeadaGel™ and BeadaHumok™ will be:
  - 20% S capillifolium
  - 20% S palustre
  - 20% S papillosum
  - 10% S Magellanicum
  - 10% S cuspidatum
  - 10% S fallax
  - 5% S tenellum
  - 5% S subnitens
- Ground preparation and water level control for the field trials will be the subject of a separate **future tender**.
  - a) On the fields, turfs may be removed or the area herbicided, deep ploughed, levelled and rolled. The fields will be levelled to improve water retention for Sphagnum growth.
  - b) Water levels will be raised to within 10cm of the peat surface, by bunding if necessary.
- Fields. Once the fields have been stripped and water level raised, the restoration operation to spread and establish the Sphagnum produced in this tender need to be undertaken. This quotation can be made on the assumption that NE will assist in transporting the contractor to site and all materials and will supply transport machinery necessary for the application of the Sphagnum except for any specialist beadagel spreading machinery .

NE will supply the cotton sedge nurse crop (1 plant 1.5cm diam per metre square planted if possible one year in advance) and carry out the mulching.

**This quotation** includes giving advice about the sourcing of the nurse crop and mulch and the

amount of fertiliser necessary and the supervision of the application of the nurse crop and mulch.

Stages involved in the restoration may include:

a) Ground preparation, if necessary, by scarifying the top 2 cm of the surface to loosen the thin decomposed peat.

b) Introduction of a nurse crop. A nurse crop such as Cotton Grass can quickly establish and provide a suitable habitat into which Sphagnum propagules are introduced.

c) Introduction of viable Sphagnum propagules. Application will be either:

i) Application as blobs of BeadaGel™ from a specialist adapted knapsack, with battery-driven peristaltic pumps. Each blob is approx. 3ml in volume, and the lance gives rows of 4 blobs. This can be quite targeted to where exactly it is applied, for example if putting into vegetated areas. This is suitable for small scale application at low application density, but is quite slow.

ii) Application by adapted sprayer. This requires Micropropagation's petrol-driven pump on site and large barrels of BeadaGel™ on site, applied from NE's Softrak vehicle. This method is better to cover large areas of bare peat suitable for this contract. **Application rates** should be quoted for at 100, 200 and 300 ml/m<sup>2</sup> (1000-3000l/ha).

d) Mulching with straw (or other suitable mulch material) - the type of mulch will be finalised nearer the time but for example could be chopped straw, or a mix of peat with chopped straw. If using straw application:

i) Around 3000kg of 'air-dry' straw per hectare is the rate should be aimed for, to give a reasonable cover without making a complete mat over the Sphagnum. (Weight of a standard bale 25kg. This means that @ 3000kg/ha = 0.3kg/m<sup>2</sup>, one bale per 80m<sup>2</sup> or 120 bales/ha).

ii) The straw will need to be well 'fluffed up' to ensure it does not clump, but once applied will need flattening down to reduce likely wind problems. It may be possible that use of 'chopped' straw from a local farmer or livery would reduce wind problems and make application easier.

e) Addition of a small amount of fertiliser depending on the fertility of the final substrate.

- The Beadahumoks will be inserted into the resultant surface on the fields:

Stages involved in this may include:

a) Application of between 1 and 4 Beadahumoks per square metre (10,000-40,000 per hectare). This sort of density should result in good, quick establishment after Molinia has been treated, to reduce/suppress regrowth.

b) Planting BeadaHumok™ is expected to be done with a long-handled hand-dibber, and the BeadaHumok™ then firmed in with planters boot.

### 3.2 Report and Photographic record

#### ➤ Framework category – outside scope

- Contractors shall make no financial investment in the project and, therefore, shall not benefit from any intellectual property rights arising from the project.
- Under the contract, a brief report will be required detailing the implementation of the production work and in the second phase, of the production of a short report detailing the application of the Sphagnum. This will help Natural England to understand the positive and negative problems related to this type of restoration work and highlight any pitfalls that need to be communicated in future tenders. To include:
  - Species and proportions of different bogmosses used in the Beadagel. Amounts of Beadagel produced.
  - Species and proportions of each used in the Beadahumoks. Amounts of Beadahumok produced.
  - A portfolio of photos and or videos taken during the preparation of the Beadagel and Beadahumok. These will potentially be used for talks, seminars etc. but only with the contractors permission. Photos/Videos to have appropriate file name explaining location and detail of the content.

- Timings, locations and methodology of the application of the Beadagel. Rates of Beadagel, nurse crop, fertiliser and mulch used.
- Timings, locations and methodology of the application of the Beadahumok. Rates of Beadahumok used.
- A portfolio of photos and or videos taken during the application of the Beadagel and Beadahumok. These will potentially be used for talks, seminars etc. but only with the contractors permission. Photos/Videos to have appropriate file name explaining location and detail of the content.
- The cover of all reports and/or maps produced as part of the contract must include a statement © Natural England and the date of creation.
- The front cover must include the following wording:
  - 'The Marches Mosses BogLIFE Project (LIFE15/NAT/UK/000786)' is financially supported by LIFE, a financial instrument of the European Commission'.
  - Display the Natural England, Natura 2000, LIFE and HLF logos. The LIFE and N2K logos are available from the European Commission's LIFE toolkit – guidance on how to use these logos can be obtained from the website or they will be supplied by the Project Officer.
- The following standardised wording must be included in the report:
  - The Marches Mosses BogLIFE project (LIFE15 NAT/UK/000786) is a five year project running from 1 October 2016 to 31 December 2021. The project aims to restore Britain's 3rd largest lowland raised bog within the Fenn's, Whixall & Bettisfield Mosses and Wem Moss NNRs near Whitchurch, Shropshire and Wrexham in Wales. The LIFE project is led by Natural England working in partnership with Natural Resources Wales and the Shropshire Wildlife Trust. The project is financially supported by LIFE, a financial instrument of the European Commission and the Heritage Lottery Fund.
  - A link to the Marches Mosses Bog LIFE Project webpage once established.

## **4 HEALTH AND SAFETY AT WORK**

### **4.1 First Aid**

- The Contractor will be responsible for the health, safety and welfare of the contract work force, and a practicing first-aider with current certification will be present at all times. The Contractor will provide all appropriate first-aid equipment.

### **4.2 Lone Working**

- Because of the remote location of the site there will be no lone working at any time.

### **4.3 Certification**

- All work is to be conducted in accordance to codes of practice and operators must hold appropriate and current training certification for any machinery or equipment they use. Copies of all current personnel certification must be presented to the Natural England Project Officer, for retention, one week prior to work commencing.

#### 4.4 Risk Assessment

- A copy of the Fenn's & Whixall Moss NNR risk assessment and those for any vehicles or operations to be used will be supplied to the successful contractor. The successful Contractor shall carry out a comprehensive Risk Assessment for all aspects of the project and present a copy to the Natural England Project Officer one week prior to work commencing. This should be signed as having been read and understood by all those who will be working on the site.

#### 4.5 Accident Reporting

- The Contractor will be responsible for immediately reporting any accidents involving either their personnel or the public to the Natural England Project Officer. All incidents involving the public, however minor, are reportable under RIDDOR.

#### 4.6 Smoking

- **SMOKING IS STRICTLY PROHIBITED ON SITE FOR ALL PERSONNEL.** There is an extreme fire hazard on the raised mire at all times.

### 5 DATES

#### 5.1 Site Visits

- Site visits with a member of the Natural England Team can be arranged if required:
- Please contact Project Officer [REDACTED] on 01948 [REDACTED]  
[REDACTED]@naturalengland.org.uk

#### 5.2 Work start date.

- Once the contract has been let, propagation work can commence.

#### 5.3 Work completion.

- Beadahumok and Beadagel propagation must be completed by 15 September 2019 and be invoiced on or before by 25th March 2020 unless otherwise agreed.

(1.2) Commencement Date: 1<sup>st</sup> August 2019

(1.3) Completion Date: by 31<sup>st</sup> December 2020

## 2. PERFORMANCE OF THE SERVICES AND DELIVERABLES

Methodology Provided by: Micropropagation Services



Lowland Raised Bog Framework Agreement  
23295 Lot 3 -

# ITT 5991

## Works to Propagate, Supply and Apply Endemic Sphagnum Species for use on Fenn's, Whixall & Bettisfield Mosses NNR

### *A unique sustainable approach*

- Sourcing of tiny amounts of endemic *Sphagnum*
- Using unique micropropagation techniques (plant tissue culture) to multiply up
- Supplying endemic *Sphagnum* in most suitable form for each restoration area
- Advising on site preparation, application techniques etc for each restoration area

# E02 Sphagnum Propagation & Spreading

July 2019

*MicroPropagation  
Services*  
Propagation Specialists since 1985

# Sustainable Production of BeadaGel™ and BeadaHumok™ by micropropagation

## The Company:

Micropropagation Services (MPS) was set up in 1985 and the directors are primarily plant-people with unique expertise and a combined 60+ years of experience of plant propagation and growing.

**MPS plant experience  
since 1985**

██████████ is highly qualified with his technical background in micropropagation (plant tissue culture) combined with 32 years of applying this in running MPS. ██████████ also has a graduate background in botany and ecology. ██████████ has extensive experience in project management, particularly recently with MPS. This provides a unique combination of skills to successfully deliver the full range of sustainable *Sphagnum* from endemic sources.

**MPS has shown reliable  
success in planting  
*Sphagnum* in major  
restoration schemes over  
many years  
(eg. MFTF, RSPB,  
National Trust)**

Everything at MPS is undertaken with a view to achieving rapid successful establishment through **sustainably sourced, genetically true and contamination-free micropropagated *Sphagnum* stock.**

With experience in large-scale planting and numerous trials in a range of habitats, MPS are well-placed to deliver both the product and its successful application and establishment.

With new purpose-built facilities, MPS has plenty of capacity to deliver product for this project - up to 1,000 hectares of restoration possible each year.

**MPS meets and exceeds NE  
sustainable  
procurement policy:  
- minimise environmental  
impact  
- reduce carbon emissions**

MPS business is fully committed at all levels to sustainable production and minimising environmental impact. Our products & business meet and exceed Natural England Sustainable Procurement Policy aims & objectives.

The restoration of *Sphagnum* back on to Natural England bogs will significantly contribute to carbon sequestration and therefore to a reduction in carbon emissions, both Natural England and nationally (and globally).

**MPS business  
commitment to  
sustainable production**

MPS new facilities have allowed us to take a leap forward in technologies to reduce our environmental impact. The glasshouse roof has 150kW of photo-voltaic panels, generating energy for the laboratory/growing rooms and the heat is recovered from here to supply underfloor heating in the glasshouses. We also have rain-water harvesting systems in place.

Deliveries and site visits will normally be made in VW BlueMotion van & car, selected for their comparative reduced CO2 emissions.

MPS Environmental Policy enclosed



# Section 1 - Production of BeadaNel™ and BeadaHumok™ Sphagnum - Micropropagated

Reliable supply of Pure  
Known Range of  
*Sphagnum* species

[REDACTED]

## Benefits of Micropropagation:

### 1) Donor Material

No Donor Site damage

No donor site damage

Tiny amounts needed

Tiny amount starter  
material needed & already  
collected from site

Our BeadaMoss® range of products are all produced from tiny amounts of starting material (only between **3-10 strands** of any *Sphagnum* species from any one site) ensuring no donor sites are damaged. Many contractors claim that harvesting operations do not damage donor sites and that they recover quickly, there is however very little scientific evidence, and what there is [REDACTED] suggests that compaction can cause long term damage.



[REDACTED]

Endemic  
*Sphagnum* Species  
available to produce  
specified species mixtures

### List of Endemic Species:

These are all already in culture in our lab and are in production to the volumes required to produce the BeadaGel™ in late summer/Autumn'19 and BeadaHumok™ late summer/Autumn'19. These will be supplied as a mix of species as specified for "Bog" and "Fen" mix.

#### *"Fen Mix"*

- 20% S palustre
- 20% S fallax
- 15% S fimbriatum
- 10% S angustifolium
- 10% S russowii
- 10% S subnitens
- 5% S capillifolium
- 5% S papillosum
- 5% S cuspidatum

#### *"Bog Mix"*

- 20% S capillifolium
- 20% S palustre
- 20% S papillosum
- 10% S magellanicum
- 10% S cuspidatum
- 10% S fallax
- 5% S tenellum
- 5% S subnitens



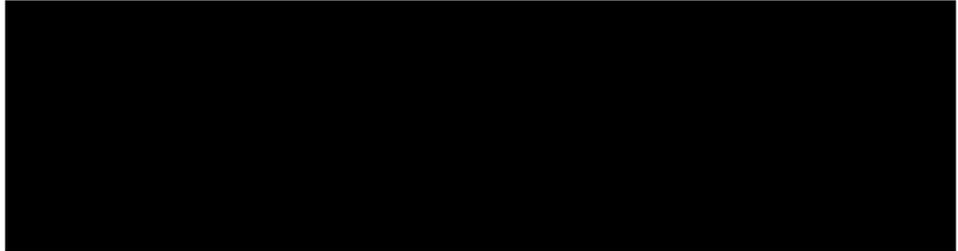
**MPS meets and exceeds NE sustainable procurement policy**

- reduce carbon emissions
- minimise environmental impact



**Reliable supply of guaranteed clean micropropagated *Sphagnum***

**2) Clean Material**



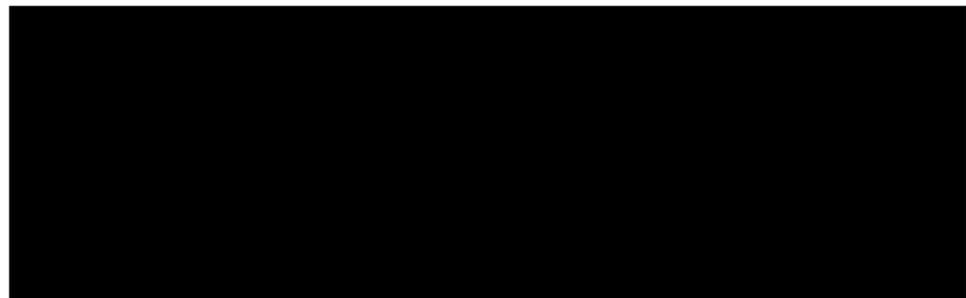
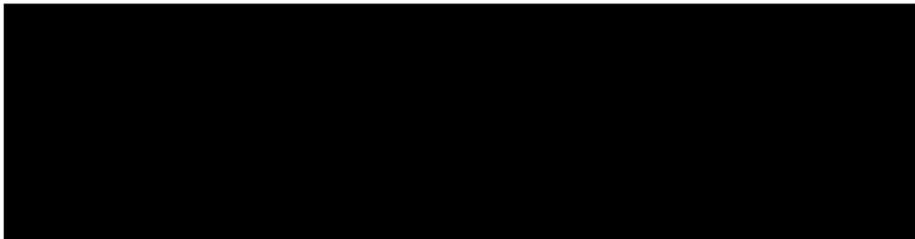
**Guaranteed Weed-free *Sphagnum***

**3) Weed Free**



**BedaGel™ and BedaHumok™ are all natural**

**All micropropagated *Sphagnum* undergoes viability testing**



**BedaGel™ sticks *Sphagnum* strands to peat, for good capillary contact**

**1) BedaGel™**



**BedaGel™ with numerous potential capitula on each strand**



[Redacted]

[Redacted]



## 2) BeadaHumok™

[Redacted]

[Redacted]



[Redacted]

[Redacted]

[Redacted]



[Redacted]



**APPLICATION (SPREADING) OF BedaGel™**  
**& PLANTING OF BedaHumok™**

Co-operative approach

between MPS and

Natural England for

delivery and application

[Redacted]

MPS use subcontractor for  
BedaHumok™ planting =  
Terra Firma Environmental  
Ltd

[Redacted]

BedaGel™ storage

[Redacted]

BedaHumok™ storage

[Redacted]

**A) BedaGel™ - application in blobs**

BedaGel™ application

to smaller targetted areas

A) In blobs

[Redacted]

[Redacted]

[Redacted]



## B) BeadaGel™ - coverage application by sprayer

BeadGel™ application  
to large pre-treated areas  
with rapid coverage  
spraying techniques - MPS  
preferred method

[Redacted text block]



## Mulch for BeadaGel™:

Use of Mulch  
Required  
for BeadaGel™ -  
apply immediately after  
BeadGel™ application

[Redacted text block]

BeadHumok™ planting  
by hand

## BeadHumok™ - planting

[Redacted text block]

**Site Preparation:**

Site Preparation  
Critical for  
Successful Establishment

[Redacted text block]

Nurse Crop - preparation  
and supply to site -  
for MPS subcontractor  
for planting

**C) Nurse Crop**

[Redacted text block]



# PROJECT DESIGN & REPORTING:

MPS Project Design

[Redacted]

MPS Technical & Practical Advice

[Redacted]

MPS Supervision of pre- and post-application Treatments

[Redacted]

## 1) Report on the Production Phase:

Report on Production Phase

[Redacted]

[Redacted]

•

## 2) Report on the Application Phase:

Report on Application Phase

[Redacted]

[Redacted]



**PRICING SCHEDULE - BASIS:**

[Redacted text block]

MPS  
Pricing Schedule -  
Basis

**For BeadaHumok™ application:  
Pricing Schedule assumes 2 options:**

[Redacted text block]

**NOTE:** [Redacted text block]

Confidentiality of  
Beadahumok™ Pricing  
for this work package

All figures on the Pricing Schedule exclude VAT.

All items included have VAT applicable

All goods and services are supplied subject to our standard Terms and Conditions of Sale. Drawing your attention to para 9 “Customer Obligations” which restricts your use of our products.

**ATTACHMENTS:**

E01 MPS Health & Safety, Project Design & Reporting  
E02 MPS Sphagnum Propagation & spreading

MPS Pricing Schedule Option 1  
MPS Pricing Schedule Option 2

MPS Employer Liability Insurance Certificate  
MPS Product & Public Liability Insurance Certificate

MPS Environmental Policy  
MPS Health & Safety Policy

MPS ProForma Risk Assessment Fenns & Whixall

MPS standard Terms and Conditions of Sale.



### 3. PRICE AND PAYMENTS

(3.1) Contract Total Fixed Price (GBP) payable by the Authority excluding VAT, payment profile and method of payment (e.g. BACS) - £79,140. As detailed below:

Pricing Schedule: **MPS Option 2 BeadaHumok™** planted by MPS subcontractor

Costs (weighting 50% of overall score) N.b. the current order will only be for the Sphagnum production.

| Category   | Price Reference | Description | Unit  | Quantity | Price          |
|--|-----------------|-------------|-------|----------|----------------|
| Beadagel production and report                           |                 |             |       |          |                |
| Sowing density   | 2.5.2           | ██████      | MI/m2 | ██████   | ██████         |
| Beadahumok production and report                         |                 |             |       |          |                |
| Sowing density   | 2.5.7           | ████        | m2    | ██████   | ██████         |
| TOTAL COSTS  |                 |             |       |          | £ 39,840 max   |
|  |                 |             |       |          |                |
| Category   | Price Reference | Description | Unit  | Quantity | Price          |
| Beadagel application, guidance, supervision and report   |                 |             |       |          |                |
| Sowing density   | 2.5.2           | ████        | MI/m2 | ██████   | ██████         |
| Beadahumok application, guidance, supervision and report |                 |             |       |          |                |
| Sowing density   | 2.5.14          | ██          | m2    | ██████   | ██████         |
| TOTAL COSTS  |                 |             |       |          | £ 39,300 max   |
| <b>Grand Total</b>                                       |                 |             |       |          | <b>£79,140</b> |

### (3.2) Invoicing and Payment

The Contractor shall issue invoices in arrears.

**All work and reporting must be completed and invoiced by end of December 2020. As per tender invite documents interim invoice for completion of Beadagel and Beadahumok production and report must be invoiced on or before 25<sup>th</sup> March 2020 unless otherwise agreed.**

The Supplier shall submit the invoice to the Authority at the following addresses:  
Accounts-Payable.neg@sscl.gse.gov.uk or  
Shared Services Connected Limited, Natural England, PO Box 793, Newport, Gwent, NP10 8FZ.

**The invoice should clearly state the purchase order number and the reference “C7 (LIFE15/NAT/UK/000786 – Marches Mosses BogLIFE Project).**

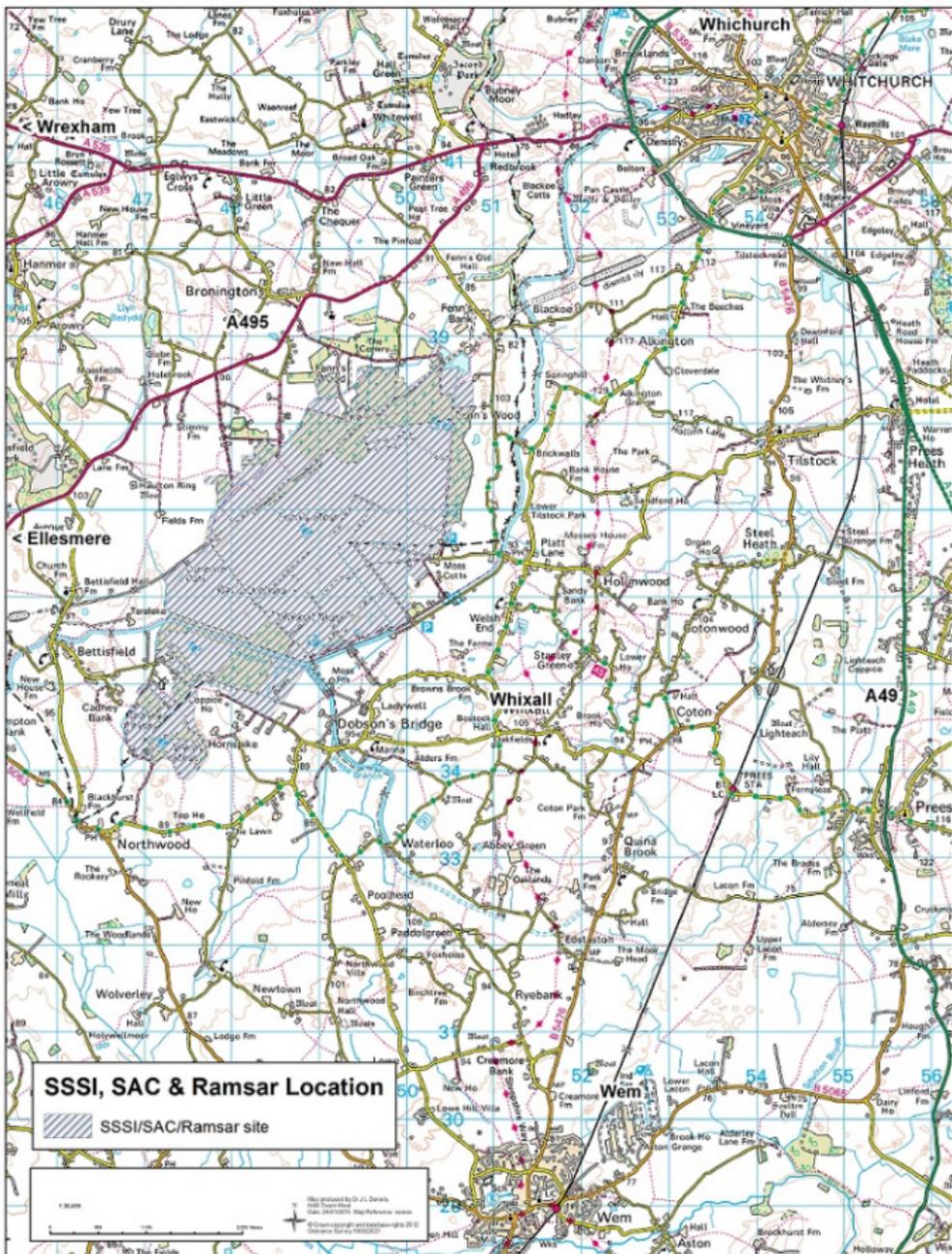
#### **AGREEMENT BY ELECTRONIC SIGNATURE**

Acceptance of the award of this contract will be made by electronic signature carried out in accordance with the 1999 EU Directive 99/93 (Community framework for electronic signatures) and the UK Electronic Communications Act 2000. Acceptance of the offer comprised in this Agreement must be made within [7] days from the date of this Award Letter and the Agreement is formed on the date on which the Contractor communicates acceptance on the Customer's electronic contract management system (“Bravo”). No other form of acknowledgement will be accepted. Please remember to quote the reference number above in any future communications relating to this contract.

# Map 1 Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses

## Site of Special Scientific Interest

### Special Area of Conservation & Ramsar Sire

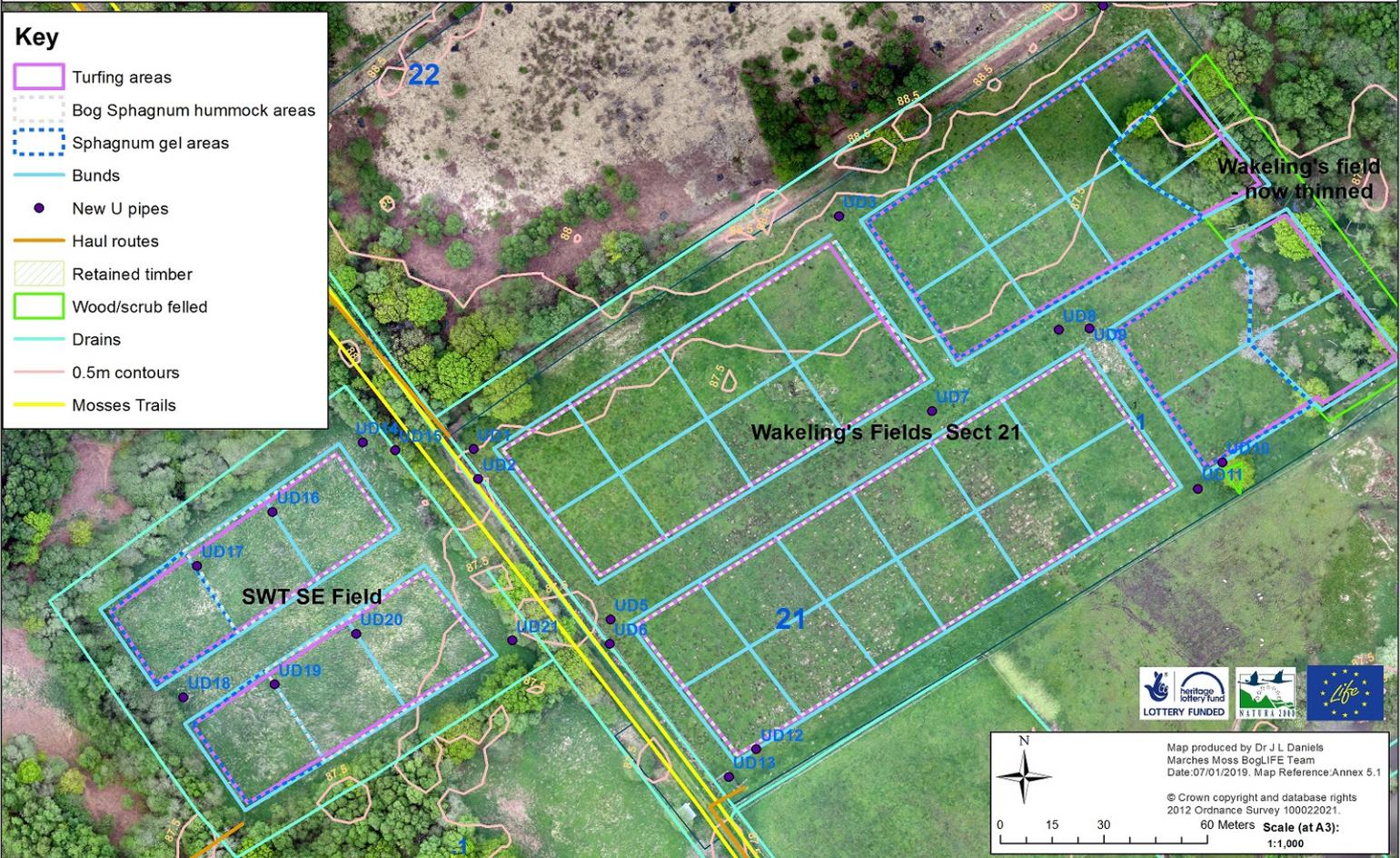


**Map 2.2 Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses NNR  
 Marches Mosses BogLIFE Project (LIFE15/NAT/UK/000786)  
 C7 Wakeling's & SWT SE Fields turfing - Sphagnum Gel & Sphagnum Hummock Areas**



**Key**

- Turfing areas
- Bog Sphagnum hummock areas
- Sphagnum gel areas
- Bunds
- New U pipes
- Haul routes
- Retained timber
- Wood/scrub felled
- Drains
- 0.5m contours
- Mosses Trails



Map produced by Dr J L Daniels  
 Marches Moss BogLIFE Team  
 Date: 07/01/2019. Map Reference: Annex 5.1

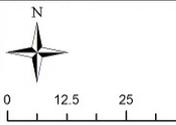
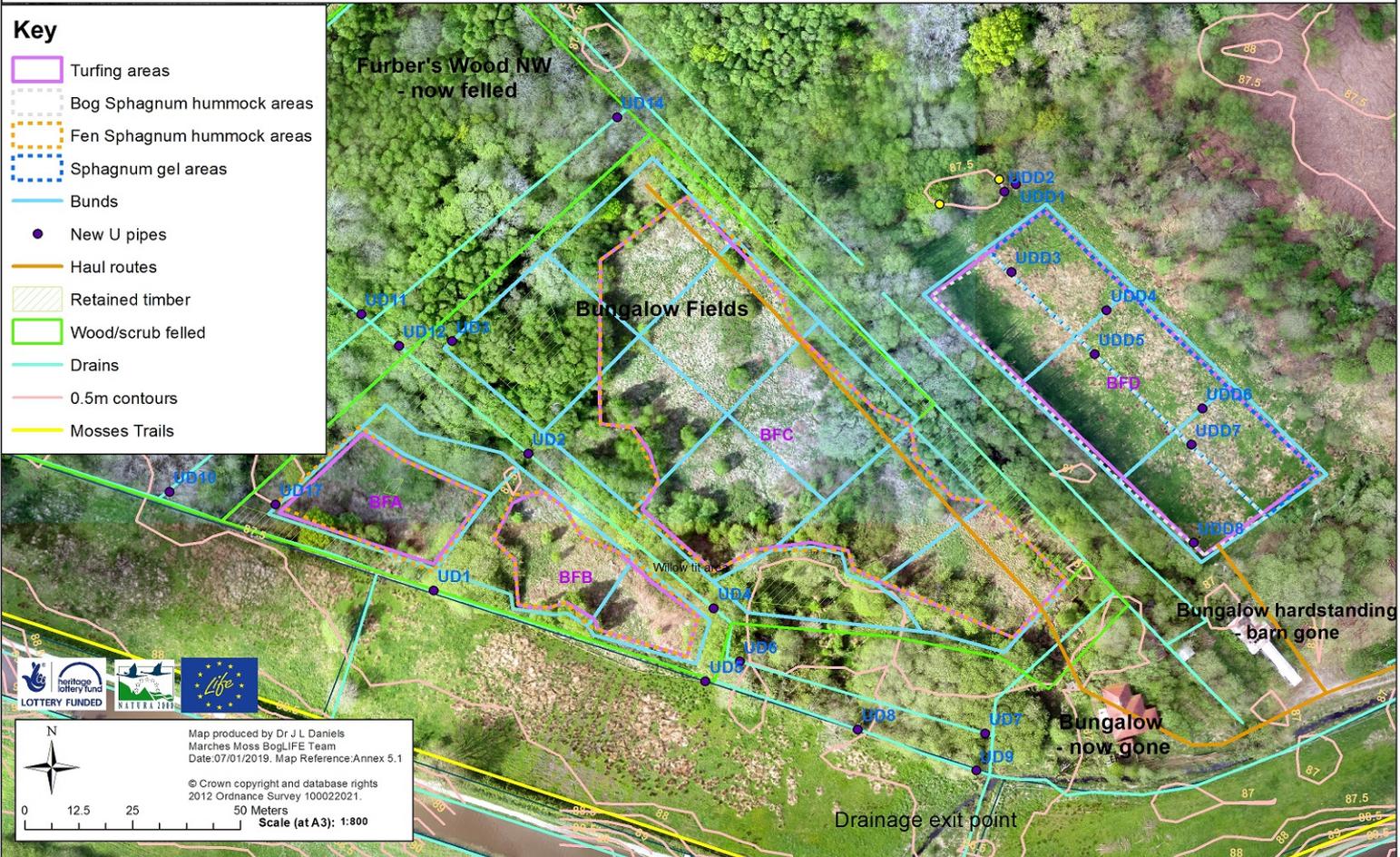
© Crown copyright and database rights  
 2012 Ordnance Survey 100022021  
 60 Meters **Scale (at A3):**  
 1:1,000

**Map 2.1 Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses NNR  
 Marches Mosses BogLIFE Project (LIFE15/NAT/UK/000786)  
 C7 The Bungalow Fields turbing - Sphagnum gel & Sphagnum hummock Areas**



**Key**

-  Turbing areas
-  Bog Sphagnum hummock areas
-  Fen Sphagnum hummock areas
-  Sphagnum gel areas
-  Bunds
-  New U pipes
-  Haul routes
-  Retained timber
-  Wood/scrub felled
-  Drains
-  0.5m contours
-  Mosses Trails



Map produced by Dr J L Daniels  
 Marches Moss BogLIFE Team  
 Date: 07/01/2019. Map Reference: Annex 5.1  
 © Crown copyright and database rights  
 2012 Ordnance Survey 100022021.  
 Scale (at A3): 1:800

Drainage exit point