



# **Conditions of Contract**

## **Short Form Services**

### **Identifying Surface Features from Upland Peatlands using LiDAR**

#### **ECM\_63330**

**December 2021**

THIS CONTRACT is dated 20 December 2021

BETWEEN

NATURAL ENGLAND of Foss House, Kings Pool, 1-2 Peasholme Green, York YO1 7PX (the “Authority”); and

Visio Impulse Limited of 71-75 Shelton Street, Covent Garden, London, WC2H 9JQ (the “Supplier”)

(each a “Party” and together the “Parties”).

BACKGROUND

- a) The Authority requires the services set out in Schedule 1 (the “Services”).
- b) The Authority has awarded this contract for the Services to the Supplier and the Supplier agrees to provide the Services in accordance with the terms of the contract.

AGREED TERMS

## **1. Definitions and Interpretation**

1.1 In the Contract, unless the context requires otherwise, the following terms shall have the meanings given to them below:

‘Approval’: the prior written consent of the Authority.

‘Authority Website’: [www.naturalengland.org.uk](http://www.naturalengland.org.uk)

‘Contract Term’: the period from the Commencement Date to the Expiry Date.

‘Contracting Authority’: an organisation defined as a contracting authority in Regulation 2 of the Public Contracts Regulations 2015.

‘Controller’: has the meaning given in the GDPR.

‘Data Loss Event’: any event that results, or may result, in unauthorised access to Personal Data held by the Supplier under this Contract, and/or actual or potential loss and/or destruction of Personal Data in breach of this Contract, including any Personal Data Breach.

‘Data Protection Impact Assessment’: an assessment by the Controller of the impact of the envisaged processing on the protection of Personal Data.

‘Data Protection Legislation’: (i) the GDPR, the LED and any applicable national implementing Laws as amended from time to time (ii) the DPA 2018 to the extent that it relates to processing of personal data and privacy; and (iii) all applicable Law about the processing of personal data and privacy.

‘Data Protection Officer’: has the meaning given in the GDPR.

‘Data Subject’: has the meaning given in the GDPR.

‘Data Subject Request’: a request made by, or on behalf of, a Data Subject in accordance with rights granted pursuant to the Data Protection Legislation to access their Personal Data.

‘Default’: a breach by the Supplier or Staff of its obligations under the Contract or any other default, negligence or negligent statement in connection with the Contract.

‘Dispute Resolution Procedure’: the dispute resolution procedure set out in Clause 20.

‘DPA 2018’: the Data Protection Act 2018.

‘Force Majeure’: any cause affecting the performance by a Party of its obligations under the Contract arising from acts, events, omissions or non-events beyond its reasonable control, including acts of God, riots, war, acts of terrorism, fire, flood, storm or earthquake and any disaster, but excluding any industrial dispute relating to the Supplier, its Staff or any other failure in the Supplier’s supply chain.

‘Fraud’: any offence under laws creating offences in respect of fraudulent acts or at common law in respect of fraudulent acts in relation to the Contract or defrauding or attempting to defraud or conspiring to defraud the Authority or any other Contracting Authority.

‘GDPR’: the General Data Protection Regulation (Regulation (EU) 2016/679).

‘Good Industry Practice’: standards, practices, methods and procedures conforming to the law and the degree of skill and care, diligence, prudence and foresight which would reasonably and ordinarily be expected from a skilled and experienced person or body engaged in a similar type of undertaking under similar circumstances.

‘Goods’: all products, documents, and materials developed by the Supplier or its agents, Sub-contractors, consultants, suppliers and Staff in relation to the Services in any form, including computer programs, data, reports and specifications (including drafts).

‘Intellectual Property Rights’: any and all intellectual property rights of any nature anywhere in the world whether registered, registerable or otherwise, including patents, utility models, trademarks, registered designs and domain names, applications for any of the foregoing, trade or business names, goodwill, copyright and rights in the nature of copyright, design rights, rights in databases, moral rights, know-how and any other intellectual property rights which subsist in computer software, computer programs, websites, documents, information, techniques, business methods, drawings, logos, instruction manuals, lists and procedures and particulars of customers, marketing methods and procedures and advertising literature, including the “look and feel” of any websites.

‘IP Materials’: all Intellectual Property Rights which are:

- a) furnished to or made available to the Supplier by or on behalf of the Authority; or
- b) created by the Supplier or Staff in the course of providing the Services or exclusively for the purpose of providing the Services.

‘Law’: any law, statute, subordinate legislation within the meaning of section 21(1) of the Interpretation Act 1978, bye-law, enforceable right within the meaning of section 2 of the European Communities Act 1972, regulation, order, regulatory policy, mandatory guidance or code of practice, judgment of a relevant court of law, or directives or requirements of any regulatory body with which the relevant Party is bound to comply.

‘LED’: Law Enforcement Directive (Directive (EU) 2016/680).

‘Personal Data’: has the meaning given in the GDPR.

‘Personal Data Breach’: has the meaning given in the GDPR.

‘Price’: the price for the Services set out in Schedule 2.

‘Processor’: has the meaning given in the GDPR.

‘Protective Measures’: appropriate technical and organisational measures which may include: pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the such measures adopted by it.

‘Replacement Supplier’: any third party supplier of services appointed by the Authority to replace the Supplier.

‘Staff’: all employees, staff, other workers, agents and consultants of the Supplier and of any Sub-contractors who are engaged in providing the Services from time to time.

‘Sub-contract’: any contract between the Supplier and a third party pursuant to which the Supplier agrees to source the provision of any of the Services from that third party.

‘Sub-contractor’: third parties which enter into a Sub-contract with the Supplier.

‘Sub-processor’: any third party appointed to process Personal Data on behalf of the Supplier related to this Contract.

‘Valid Invoice’: an invoice containing the information set out in Clause 3.3.

‘VAT’: Value Added Tax.

‘Working Day’: Monday to Friday excluding any public holidays in England and Wales.

1.2 The interpretation and construction of the Contract is subject to the following provisions:

- a) words importing the singular meaning include where the context so admits the plural meaning and vice versa;
- b) words importing the masculine include the feminine and the neuter;
- c) reference to any statutory provision, enactment, order, regulation or other similar instrument are construed as a reference to the statutory provision enactment, order regulation or instrument (including any instrument of the European Union) as amended, replaced, consolidated or re-enacted from time to time, and include any orders, regulations, codes of practice, instruments or other subordinate legislation made under it;
- d) reference to any person includes natural persons and partnerships, firms and other incorporated bodies and all other legal persons of whatever kind and however constituted and their successors and permitted assigns or transferees;
- e) the headings are inserted for ease of reference only and do not affect the interpretation or construction of the Contract;

- f) references to the Services include references to the Goods;
- g) references to Clauses and Schedules are to clauses and schedules of the Contract; and
- h) the Schedules form part of the Contract and have effect as if set out in full in the body of the Contract and any reference to the Contract includes the Schedules.

## **2. Contract and Contract Term**

2.1 The Supplier shall provide the Authority with the services set out in Schedule 1 (the “Services”) in accordance with the terms and conditions of the Contract.

2.2 The Contract is effective on 3 January 2022 (the “Commencement Date”) and ends on 31 March 2022 (the “Expiry Date”) unless terminated early or extended in accordance with the Contract.

## **3. Price and Payment**

3.1 In consideration of the Supplier providing the Services in accordance with the Contract, the Authority shall pay the Price to the Supplier.

3.2 The Authority shall:

- a) provide the Supplier with a purchase order number (“PO Number”); and
- b) pay all undisputed sums due to the Supplier within 30 days of receipt of a Valid Invoice.

3.3 A Valid Invoice shall:

- a) contain the correct PO Number;
- b) express the sum invoiced in sterling; and
- c) include VAT at the prevailing rate as a separate sum or a statement that the Supplier is not registered for VAT.

3.4 The Supplier shall submit invoices as set out in the specification and payment schedule milestones to the Authority [REDACTED],

[REDACTED],  
[REDACTED]

3.5 The Supplier acknowledges that:

- a) if the Supplier does not include VAT on an invoice or does not include VAT at the correct rate, the Authority will not be liable to pay the Supplier any additional VAT;
- b) invoices which do not include the information set out in Clause 3.3 will be rejected.

3.6 Any late payment of an undisputed amount is not made by the Authority by the due date, then the Authority shall pay the Supplier interest at the interest rate specified in the Late Payment of Commercial Debts (Interest) Act 1998.

3.7 The Supplier shall not suspend provision of the Services if any payment is overdue.

3.8 The Supplier indemnifies the Authority on a continuing basis against any liability, including any interest, penalties or costs incurred, which is levied, demanded or assessed on the Authority at any time in respect of the Supplier's failure to account for or to pay any VAT relating to payments made to the Supplier under the Contract.

#### **4. Extension of the Contract**

4.1 The Authority may, by written notice to the Supplier, extend the Contract for a further period up to 0 months.

#### **5. Warranties and Representations**

5.1 The Supplier warrants and represents for the Contract Term that:

- a) it has full capacity and authority and all necessary consents and regulatory approvals to enter into the Contract and to provide the Services;
- b) the Contract is executed by a duly authorised representative of the Supplier;
- c) in entering the Contract it has not committed any Fraud;
- d) as at the Commencement Date, all information contained in its tender or other offer made by the Supplier to the Authority remains true, accurate and not misleading, save as may have been specifically disclosed in writing to the Authority prior to execution of the Contract and that it will advise the Authority of any fact, matter or circumstance of which it may become aware which would render such information false or misleading;
- e) no claim is being asserted and no litigation, arbitration or administrative proceeding is presently in progress or, to the best of its knowledge and belief, pending or threatened against it or any of its assets which will or might have a material adverse effect on its ability to perform its obligations under the Contract;
- f) it is not subject to any contractual obligation, compliance with which is likely to have a material adverse effect on its ability to provide the Services;
- g) no proceedings or other steps have been taken and not discharged (or, to the best of its knowledge, are threatened) for the winding up of the Supplier or for its dissolution or for the appointment of a receiver, administrative receiver, liquidator, manager, administrator or similar in relation to any of the Supplier's assets or revenue;
- h) it owns, or has obtained or is able to obtain valid licences for, all Intellectual Property Rights that are necessary to provide the Services; and
- i) Staff shall be engaged on terms which do not entitle them to any Intellectual Property Right in any IP Materials;
- j) it will comply with its obligations under the Immigration, Asylum and Nationality Act 2006.

5.2 The Supplier warrants and represents that in the 3 years prior to the date of the Contract:

- a) it has conducted all financial accounting and reporting activities in compliance with generally accepted accounting principles and has complied with relevant securities;
- b) it has not done or omitted to do anything which could have a material adverse effect on its assets, financial condition or position as a going concern or its ability to provide the Services; and
- c) it has complied with all relevant tax laws and regulations and no tax return submitted to a relevant tax authority has been found to be incorrect under any anti-abuse rules.

## **6. Service Standards**

6.1 The Supplier shall provide the Services or procure that they are provided with reasonable skill and care, in accordance with Good Industry Practice prevailing from time to time and with Staff who are appropriately trained and qualified.

6.2 If the Services do not meet the Specification, the Supplier shall at its own expense re-schedule and carry out the Services in accordance with the Specification within such reasonable time as may be specified by the Authority.

6.3 The Authority may by written notice to the Supplier reject any of the Goods which fail to conform to the approved sample or fail to meet the Specification. Such notice shall be given within a reasonable time after delivery to the Authority of the Goods. If the Authority rejects any of the Goods it may (without prejudice to its other rights and remedies) either:

- a) have the Goods promptly either repaired by the Supplier or replaced by the Supplier with Goods which conform in all respects with the approved sample or with the Specification and due delivery shall not be deemed to have taken place until the repair or replacement has occurred;

or

- b) treat the Contract as discharged by the Supplier's breach and obtain a refund (if the Goods have already been paid for) from the Supplier in respect of the Goods concerned together with payment of any additional expenditure reasonably incurred by the Authority in obtaining replacements.

6.4 The Authority will be deemed to have accepted the Goods if it expressly states the same in writing or fails to reject the Goods in accordance with Clause 6.3.

6.5 If the Authority issues a receipt note for delivery of the Goods it shall not constitute any acknowledgement of the condition, quantity or nature of those Goods or the Authority's acceptance of them.

6.6 The Supplier hereby guarantees the Goods against faulty materials or workmanship for such period as may be specified in the Specification or, if no period is so specified, for 3 years from the date of acceptance. If the Authority shall within such guarantee period or within 30 Working Days thereafter give notice in writing to the Supplier of any defect in any of the Goods as may have arisen during such guarantee period under proper and normal use, the Supplier shall (without prejudice to any other rights and remedies which the Authority may have) promptly remedy such defects (whether by repair or replacement as the Authority shall choose) free of charge.

6.7 Any Goods rejected or returned by the Authority pursuant to this Clause 6 shall be returned to the Supplier at the Supplier's risk and expense.

## **7. Termination**

7.1 The Authority may terminate the Contract at any time by giving 30 days written notice to the Supplier.

7.2 The Authority may terminate the Contract in whole or in part by notice to the Supplier with immediate effect and without compensation to the Supplier if:

- a) being an individual, the Supplier is the subject of a bankruptcy order; has made a composition or arrangement with his creditors; dies or is adjudged incapable of managing his affairs within the meaning of Part VII of the Mental Health Act 1983;
- b) being a company, the Supplier goes into compulsory winding up, or passes a resolution for voluntary winding up, or suffers an administrator, administrative receiver or receiver and manager to be appointed or to take possession over the whole or any part of its assets, is dissolved; or has entered into a voluntary arrangement with its creditors under the Insolvency Act 1986, or has proposed or entered into any scheme of arrangement or composition with its creditors under section 425 of the Companies Act 1985; or has been dissolved;
- c) being a partnership, limited liability partnership or unregistered company, the Supplier or an individual member of it goes into compulsory winding up; is dissolved; suffers an administrator or receiver or manager to be appointed over the whole or any part of its assets; or has entered into a composition or voluntary arrangement with its creditors;
- d) the Supplier is in any case affected by any similar occurrence to any of the above in any jurisdiction;
- e) subject to Clause 7.3, the Supplier commits a Default;
- f) there is a change of control of the Supplier; or
- g) the Supplier or Staff commits Fraud in relation to the Contract or any other contract with the Crown (including the Authority).

7.3 If the Supplier commits a Default which is capable of being remedied, the Authority may terminate the Contract pursuant to Clause 7.2(e) only if the Supplier has failed to remedy the Default within 20 Working Days of being notified of the Default by the Authority.

## **8. Consequences of Expiry or Termination**

8.1 If the Authority terminates the Contract under Clause 7.2:

- a) and then makes other arrangements for the supply of the Services, the Authority may recover from the Supplier the cost reasonably incurred of making those other arrangements and any additional expenditure incurred by the Authority throughout the remainder of the Contract Term; and
- b) no further payments shall be payable by the Authority to the Supplier (for the Services supplied by the Supplier prior to termination and in accordance with the Contract but where the payment has yet to be made by the Authority), until the Authority has established the final cost of making the other arrangements envisaged under Clause 8.1(a).

8.2 On expiry or termination of the Contract the Supplier shall:



- a) co-operate fully with the Authority to ensure an orderly migration of the Services to the Authority or, at the Authority's request, a Replacement Supplier; and
- b) procure that all data and other material belonging to the Authority (and all media of any nature containing information and data belonging to the Authority or relating to the Services) shall be delivered promptly to the Authority.

8.3 Save as otherwise expressly provided in the Contract:

- a) termination or expiry of the Contract shall be without prejudice to any rights, remedies or obligations accrued under the Contract prior to termination or expiration and nothing in the Contract shall prejudice the right of either Party to recover any amount outstanding at such termination or expiry; and
- b) termination of the Contract shall not affect the continuing rights, remedies or obligations of the Authority or the Supplier under Clauses 3, 8 to 13, 17, 26 and 28.

## **9. Liability, Indemnity and Insurance**

9.1 Notwithstanding any other provision in the Contract, neither Party excludes or limits liability to the other Party for:

- a) death or personal injury caused by its negligence;
- b) Fraud or fraudulent misrepresentation; or
- c) any breach of any obligations implied by section 12 of the Sale of Goods Act 1979 or Parts I and II of the Supply of Goods and Services Act 1982.

9.2 The Supplier shall indemnify and keep indemnified the Authority against all claims, proceedings, demands, actions, damages, costs, breach of statutory duty, expenses and any other liabilities which arise in tort (including negligence) default or breach of the Contract to the extent that any such loss or claim is due to the breach of contract, negligence, wilful default or Fraud of itself or of Staff or Sub-contractors save to the extent that the same is directly caused by the negligence, breach of the Contract or applicable law by the Authority.

9.3 The Supplier shall not exclude liability for additional operational, administrative costs and/or expenses or wasted expenditure resulting from the direct Default of the Supplier.

9.4 Subject to Clause 9.1:

- a) neither Party is liable to the other for any:
  - (i) loss of profits, business, revenue or goodwill;
  - (ii) loss of savings (whether anticipated or otherwise); and/or
  - (iii) indirect or consequential loss or damage
- b) each Party's total aggregate liability in respect of all claims, losses damages, whether arising from tort (including negligence), breach of contract or otherwise under or in connection with the Contract, shall not exceed £1,000,000 (one million pounds) or 2x the value of the Contract whichever is the lower amount.

9.5 The Supplier shall, with effect from the Commencement Date and for such period as necessary to enable the Supplier to comply with its obligations under the Contract, take out and maintain with a reputable insurance company a policy or policies of insurance providing an adequate level of cover in respect of all risks which may be incurred by the Supplier, arising out of the Supplier's performance of its obligations under the Contract, including employer's liability, death or personal injury, loss of or damage to property or any other loss, including financial loss arising from any advice given or omitted to be given by the Supplier. Such insurance shall be maintained for the Contract Term and for a minimum of 6 years following the end of the Contract.

9.6 The Supplier shall give the Authority, on request, copies of all insurance policies referred to in this Clause or a broker's verification of insurance to demonstrate that the appropriate cover is in place, together with receipts or other evidence of payment of the latest premiums due under those policies.

9.7 If the Supplier fails to comply with Clauses 9.5 and 9.6 the Authority may make alternative arrangements to protect its interests and may recover the costs of such arrangements from the Supplier.

9.8 The provisions of any insurance or the amount of cover shall not relieve the Supplier of any liabilities under the Contract.

9.9 The Supplier shall not take any action or fail to take any reasonable action, or (to the extent that it is reasonably within its power) permit anything to occur in relation to the Supplier, which would entitle any insurer to refuse to pay any claim under any insurance policy in which the Supplier is an insured, a co-insured or additional insured person.

## **10. Confidentiality and Data Protection**

10.1. Subject to Clause 10.2, unless agreed otherwise in writing, the Supplier shall, and shall procure that Staff shall, keep confidential all matters relating to the Contract.

10.2. Clause 10.1 shall not apply to any disclosure of information:

- a) required by any applicable law;
- b) that is reasonably required by persons engaged by the Supplier in performing the Supplier's obligations under the Contract;
- c) where the Supplier can demonstrate that such information is already generally available and in the public domain other than as a result of a breach of Clause 10.1; or
- d) which is already lawfully in the Supplier's possession prior to its disclosure by the Authority.

10.3. The Parties acknowledge that for the purposes of the Data Protection Legislation, the Authority is the Controller and the Supplier is the Processor unless otherwise specified in Schedule 3. The only processing that the Supplier is authorised to do is listed in Schedule 3 by the Authority and may not be determined by the Supplier.

10.4. The Supplier shall notify the Authority immediately if it considers that any of the Authority's instructions infringe the Data Protection Legislation.

10.5. The Supplier shall provide all reasonable assistance to the Authority in the preparation of any Data Protection Impact Assessment prior to commencing any processing. Such assistance may, at the discretion of the Authority, include:

- a. a systematic description of the envisaged processing operations and the purpose of the processing;
- b. an assessment of the necessity and proportionality of the processing operations in relation to the Services;
- c. an assessment of the risks to the rights and freedoms of Data Subjects; and
- d. the measures envisaged to address the risks, including safeguards, security measures and mechanisms to ensure the protection of Personal Data.

10.6. The Supplier shall, in relation to any Personal Data processed in connection with its obligations under this Contract:

- a. process that Personal Data only in accordance with Schedule 3 unless the Supplier is required to do otherwise by Law. If it is so required the Supplier shall promptly notify the Authority before processing the Personal Data unless prohibited by Law;
- b. ensure that it has in place Protective Measures which are appropriate to protect against a Data Loss Event, which the Authority may reasonably reject (but failure to reject shall not amount to approval by the Authority of the adequacy of the Protective Measures), having taken account of the:
  - (i) nature of the data to be protected;
  - (ii) harm that might result from a Data Loss Event;
  - (iii) state of technological development; and
  - (iv) cost of implementing any measures;
- c. ensure that:
  - (i) the Staff do not process Personal Data except in accordance with this Contract (and in particular Schedule 3);
  - (ii) it takes all reasonable steps to ensure the reliability and integrity of any Staff who have access to the Personal Data and ensure that they:
    - A. are aware of and comply with the Supplier's duties under this clause;
    - B. are subject to appropriate confidentiality undertakings with the Supplier or any Sub-processor;
    - C. are informed of the confidential nature of the Personal Data and do not publish, disclose or divulge any of the Personal Data to any third party unless directed in writing to do so by the Authority or as otherwise permitted by this Contract; and
    - D. have undergone adequate training in the use, care, protection and handling of Personal Data; and
- d. not transfer Personal Data outside of the European Union unless the prior written consent of the Authority has been obtained and the following conditions are fulfilled:

- (i) the Authority or the Supplier has provided appropriate safeguards in relation to the transfer (whether in accordance with the GDPR Article 46 or LED Article 37) as determined by the Authority;
  - (ii) the Data Subject has enforceable rights and effective legal remedies;
  - (iii) the Supplier complies with its obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred (or, if it is not so bound, uses its best endeavours to assist the Authority in meeting its obligations); and
  - (iv) the Supplier complies with any reasonable instructions notified to it in advance by the Authority with respect to the processing of the Personal Data;
- e. at the written direction of the Authority, delete or return Personal Data (and any copies of it) to the Authority on termination of the Contract unless the Supplier is required by Law to retain the Personal Data.

10.7. Subject to clause 10.8 the Supplier shall notify the Authority immediately if, in relation to any Personal Data processed in connection with its obligations under this Contract, it:

- a. receives a Data Subject Request (or purported Data Subject Request);
- b. receives a request to rectify, block or erase any Personal Data;
- c. receives any other request, complaint or communication relating to either Party's obligations under the Data Protection Legislation;
- d. receives any communication from the Information Commissioner or any other regulatory authority;
- e. receives a request from any third party for disclosure of Personal Data where compliance with such request is required or purported to be required by Law; or
- f. becomes aware of a Data Loss Event.

10.8. The Supplier's obligation to notify under clause 10.7 shall include the provision of further information to the Authority in phases, as details become available.

10.9. Taking into account the nature of the processing, the Supplier shall provide the Authority with full assistance in relation to either Party's obligations under Data Protection Legislation in relation to any Personal Data processed in connection with its obligations under this Contract and any complaint, communication or request made under Clause 10.7 (and insofar as possible within the timescales reasonably required by the Authority) including by promptly providing:

- a. the Authority with full details and copies of the complaint, communication or request;
- b. such assistance as is reasonably requested by the Authority to enable the Authority to comply with a Data Subject Request within the relevant timescales set out in the Data Protection Legislation;
- c. the Authority, at its request, with any Personal Data it holds in relation to a Data Subject;
- d. assistance as requested by the Authority following any Data Loss Event;

e. assistance as requested by the Authority with respect to any request from the Information Commissioner's Office, or any consultation by the Authority with the Information Commissioner's Office.

10.10. The Supplier shall maintain complete and accurate records and information to demonstrate its compliance with this clause 10. This requirement does not apply where the Supplier employs fewer than 250 staff, unless:

- a. the Authority determines that the processing is not occasional;
- b. the Authority determines the processing includes special categories of data as referred to in Article 9(1) of the GDPR or Personal Data relating to criminal convictions and offences referred to in Article 10 of the GDPR; or
- c. the Authority determines that the processing is likely to result in a risk to the rights and freedoms of Data Subjects.

10.11. The Supplier shall allow for audits of its Personal Data processing activity by the Authority or the Authority's designated auditor.

10.12. Each Party shall designate its own Data Protection Officer if required by the Data Protection Legislation.

10.13. Before allowing any Sub-processor to process any Personal Data related to this Contract, the Supplier must:

- a. notify the Authority in writing of the intended Sub-processor and processing;
- b. obtain the written consent of the Authority; and
- c. enter into a written agreement with the Sub-processor which give effect to the terms set out in this clause 10 such that they apply to the Sub-processor; and.
- d. provide the Authority with such information regarding the Sub-processor as the Authority may reasonably require.

10.14. The Supplier shall remain fully liable for all acts or omissions of any of its Sub-processors.

10.15. The Authority may, at any time on not less than 30 Working Days' notice, revise this clause by replacing it with any applicable controller to processor standard clauses or similar terms forming part of an applicable certification scheme (which shall apply when incorporated by attachment to this Contract).

10.16. The Parties agree to take account of any non-mandatory guidance issued by the Information Commissioner's Office. The Authority may on not less than 30 Working Days' notice to the Supplier amend this Contract to ensure that it complies with any guidance issued by the Information Commissioner's Officer.

10.17. This clause 10 shall apply during the Contract Term and indefinitely after its expiry.

## **11. Freedom of Information**

11.1. The Supplier acknowledges that the Authority is subject to the Freedom of Information Act 2000 and the Environmental Information Regulations 2004 (the "Information Acts") and may be required to disclose certain information to third parties including information relating to this Contract pursuant to the Information Acts.

11.2. If the Authority receives a request for information relating to the Contract pursuant to either of the Information Acts, the Authority may disclose such information as necessary in order to comply with its duties under the Information Acts.

## **12. Intellectual Property Rights**

12.1 The IP Materials shall vest in the Authority and the Supplier shall not, and shall procure that Staff shall not, use or disclose any IP Materials without Approval save to the extent necessary for the Supplier to provide the Services.

12.2 The Supplier shall indemnify and keep indemnified the Authority and the Crown against all actions, claims, demands, losses, damages, costs and expenses and other liabilities which the Authority or the Crown may suffer or incur arising from any infringement or alleged infringement of any Intellectual Property Rights by the availability of the Services except to the extent that they have been caused by or contributed to by the Authority's acts or omissions.

## **13. Prevention of Corruption and Fraud**

13.1. The Supplier shall act within the provisions of the Bribery Act 2010.

13.2. The Supplier shall take all reasonable steps, in accordance with Good Industry Practice, to prevent Fraud by Staff and the Supplier (including its shareholders, members and directors) in connection with the receipt of money from the Authority.

13.3. The Supplier shall notify the Authority immediately if it has reason to suspect that Fraud has occurred, is occurring or is likely to occur.

## **14. Discrimination**

14.1 The Supplier shall not unlawfully discriminate within the meaning and scope of any law, enactment, order or regulation relating to discrimination in employment.

14.2 The Supplier shall notify the Authority immediately in writing as soon as it becomes aware of any legal proceedings threatened or issued against it by Staff on the grounds of discrimination arising in connection with the Services.

## **15. Environmental and Ethical Policies**

15.1 The Supplier shall provide the Services in accordance with the Authority's policies on the environment, sustainable and ethical procurement and timber and wood derived products, details of which are available on the Authority Website.

## **16. Health and Safety**

16.1 Each Party will promptly notify the other Party of any health and safety hazards which may arise in connection with the Services.

16.2 While on the Authority's premises, the Supplier shall comply with the Authority's health and safety policies.

16.3 The Supplier shall notify the Authority immediately if any incident occurs in providing the Services on the Authority's premises which causes or may cause personal injury.

16.4 The Supplier shall comply with the requirements of the Health and Safety at Work etc Act 1974, and with any other acts, orders, regulations and codes of practice relating to health and safety, which may apply to Staff and other persons working on the Authority's premises when providing the Services.

16.5 The Supplier's health and safety policy statement (as required by the Health and Safety at Work etc. Act 1974) shall be made available to the Authority on request.

## **17. Monitoring and Audit**

17.1 The Authority may monitor the provision of the Services and the Supplier shall co-operate, and shall procure that Staff and any Sub-contractors co-operate, with the Authority in carrying out the monitoring at no additional charge to the Authority.

17.2 The Supplier shall keep and maintain until 6 years after the end of the Contract Term full and accurate records of the Contract including the Services supplied under it and all payments made by the Authority. The Supplier shall allow the Authority, the National Audit Office and the Comptroller and Auditor General reasonable access to those records and on such terms as they may request.

17.3 The Supplier agrees to provide, free of charge, whenever requested, copies of audit reports obtained by the Supplier in relation to the Services.

## **18. Transfer and Sub-Contracting**

18.1 The Supplier shall not transfer, charge, assign, sub-contract or in any other way dispose of the Contract or any part of it without Approval.

18.2 If the Supplier enters into any Sub-contract in connection with the Contract it shall:

- a) remain responsible to the Authority for the performance of its obligations under the Contract;
- b) be responsible for the acts and/or omissions of its Sub-contractors as though they are its own;
- c) impose obligations on its Sub-contractors in the same terms as those imposed on it pursuant to the Contract and shall procure that the Sub-Supplier complies with such terms;
- d) pay its Sub-contractors' undisputed invoices within 30 days of receipt.

18.3 The Authority may assign, novate or otherwise dispose of its rights and obligations under the Contract or any part thereof to:

- a) any Contracting Authority or any other body established by the Crown or under statute in order substantially to perform any of the functions that had previously been performed by the Authority; or

b) any private sector body which performs substantially any of the functions of the Authority.

18.4 Any change in the legal status of the Authority such that it ceases to be a Contracting Authority shall not affect the validity of the Contract. In such circumstances the Contract shall bind and inure to the benefit of any successor body to the Authority.

## **19. Variation**

19.1 Subject to the provisions of this Clause 19, the Authority may change the Specification provided that such change is not a material change to the Specification (a "Variation").

19.2 The Authority may request a Variation by notifying the Supplier with sufficient information to assess the extent of the Variation and consider whether any change to the Price is required in order to implement it. Variations agreed by the Parties shall be made in writing.

19.3 If the Supplier is unable to accept the Variation or where the Parties are unable to agree a change to the Price, the Authority may:

- a) allow the Supplier to fulfil its obligations under the Contract without the Variation; or
- b) refer the request to be dealt with under the Dispute Resolution Procedure.

## **20. Dispute Resolution**

20.1 The Parties shall attempt in good faith to resolve any dispute between them arising out of the Contract within 10 Working Days of either Party notifying the other of the dispute and such efforts shall include the escalation of the dispute to the Supplier's representative and the Authority's commercial director or equivalent.

20.2 Nothing in this dispute resolution procedure shall prevent the Parties from seeking from any court of competent jurisdiction an interim order restraining the other Party from doing any act or compelling the other Party to do any act.

20.3 If the dispute cannot be resolved by the Parties pursuant to Clause 20.1 the Parties shall refer it to mediation pursuant to the procedure set out in Clauses 20.5 to 20.10.

20.4 The obligations of the Parties under the Contract shall not cease, or be suspended or delayed by the reference of a dispute to mediation and the Supplier and Staff shall comply fully with the requirements of the Contract at all times.

20.5 A neutral adviser or mediator (the "Mediator") shall be chosen by agreement between the Parties or, if they are unable to agree a Mediator within 10 Working Days after a request by one Party or if the chosen Mediator is unable to act, either Party shall within 10 Working Days from the date of the proposal to appoint a Mediator or within 10 Working Days of notice to either Party that he is unable or unwilling to act, apply to the Centre for Effective Dispute Resolution to appoint a Mediator.

20.6 The Parties shall, within 10 Working Days of the appointment of the Mediator, meet the Mediator to agree a programme for the disclosure of information and the structure to be adopted for negotiations. The Parties may at any stage seek assistance from the Centre for Effective Dispute Resolution to provide guidance on a suitable procedure.



20.7 Unless otherwise agreed, all negotiations connected with the dispute and any settlement agreement relating to it shall be conducted in confidence and without prejudice to the rights of the Parties in any future proceedings.

20.8 If the Parties reach agreement on the resolution of the dispute, the agreement shall be recorded in writing and shall be binding on the Parties once it is signed by their duly authorised representatives.

20.9 Failing agreement, either of the Parties may invite the Mediator to provide a non-binding but informative written opinion. Such opinion shall be provided on a without prejudice basis and shall not be used in evidence in any proceedings relating to the Contract without the prior written consent of both Parties.

20.10 If the Parties fail to reach agreement within 60 Working Days of the Mediator being appointed, or such longer period as may be agreed by the Parties, then the dispute may be referred to the Courts.

20.11 Subject to Clause 20.2, the Parties shall not institute court proceedings until the procedures set out in Clauses 20.1 and 20.5 to 20.10 have been completed.

## **21. Supplier's Status**

21.1 Nothing in the Contract shall be construed as constituting a partnership between the Parties or as constituting either Party as the agent for the other for any purposes except as specified by the terms of the Contract.

21.2 The Supplier shall not (and shall ensure that Staff shall not) say or do anything that might lead any person to believe that the Supplier is acting as the agent, partner or employee of the Authority.

## **22. Notices**

22.1 Notices shall be in writing and in English and shall be deemed given if signed by or on behalf of a duly authorised officer of the Party giving the notice and if left at, or sent by first class mail to the address of the receiving Party as specified in the Contract (or as amended from time to time by notice in writing to the other Party).

## **23. Entire Agreement**

23.1 The Contract constitutes the entire agreement between the Parties relating to the subject matter of the Contract. The Contract supersedes all prior negotiations, representations, arrangements and undertakings.

## **24. Third Party Rights**

24.1 No term of the Contract is intended to confer a benefit on, or be enforceable by, any person who is not a Party other than the Crown.

## **25. Waiver**

25.1 The failure of either Party to insist upon strict performance of any provision of the Contract, or the failure of either Party to exercise, or any delay in exercising, any right or remedy shall not constitute a waiver of that right or remedy and shall not cause a diminution of the obligations established by the Contract.

25.2 No waiver shall be effective unless it is expressly stated to be a waiver and communicated to the other Party in writing.

25.3 A waiver of any right or remedy arising from a breach of the Contract shall not constitute a waiver of any right or remedy arising from any other or subsequent breach of the Contract.

## **26. Publicity**

26.1 The Supplier shall not without Approval:

- a) make any press announcements or publicise the Contract or its contents in any way; or
- b) use the Authority's name or logo in any promotion or marketing or announcement.

26.2 The Authority may publish the Contract on the Authority Website or another website at its discretion.

## **27. Force Majeure**

27.1 Except to the extent that the Supplier has not complied with any business continuity plan agreed with the Authority, neither Party shall be liable for any failure to perform its obligations under the Contract if, and to the extent, that the failure is caused by act of God, war, riots, acts of terrorism, fire, flood, storm or earthquake and any disaster but excluding any industrial dispute relating to the Supplier, Staff or Sub-contractors.

27.2 If there is an event of Force Majeure, the affected Party shall use all reasonable endeavours to mitigate the effect of the event of Force Majeure on the performance of its obligations.

## **28. Governing Law and Jurisdiction**

28.1 The Contract shall be governed by and interpreted in accordance with English law and shall be subject to the jurisdiction of the Courts of England and Wales.

28.2 The submission to such jurisdiction shall not limit the right of the Authority to take proceedings against the Supplier in any other court of competent jurisdiction and the taking of proceedings in any other court of competent jurisdiction shall not preclude the taking of proceedings in any other jurisdiction whether concurrently or not.

## **29. Electronic Signature**

29.1 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.

29.2 The Contract is formed on the date on which the Supplier communicates acceptance on the Authority's electronic contract management system.

29.3 No other form of acknowledgement will be accepted.

### **30. Precedence**

In the event of and only to the extent of any conflict between the terms and conditions or the special terms below, the conflict shall be resolved in accordance with the following order of precedence:

- a) the special terms below;
- b) the main terms of the Contract (pages 1 to 15);
- c) any other document referred to in the Agreement

Unless expressly agreed, a document varied pursuant to clause 19 shall not take higher precedence than specified here.

## SCHEDULE 1 - SPECIFICATION OF SERVICES

Identifying Surface Features from Upland Peatlands using LiDAR.

### Summary

The Authority is Natural England. The Authority's priorities are to secure a healthy natural environment; a sustainable, low-carbon economy; a thriving farming sector and a sustainable, healthy and secure food supply. Further information about the Authority can be found at: [Natural England](#).

The England Peat Map Project is a Defra-funded project to map peat resources in England. The project will use a range of modelling and analysis techniques, combined with earth observation and field-captured data, to describe new baseline evidence of the extent, depth and condition of peat across the country.

This Contract forms part of the work to describe peat condition. The [Environment Agency's National Lidar Programme](#) (NLP) data presents a great opportunity to identify surface features that are important in understanding peatland condition, particularly artificial drainage channels (grips), eroding gullies and peat 'haggs'. This Contract will help us identify what can be reliably and accurately extracted from lidar, and the extent to which data processing and feature extraction can be automated, using current techniques and NLP data. It will also explore how to scale-up the methods from site case studies, to enable us to develop national outputs in 2022/23.

### Background

#### **The NCEA (Natural Capital & Ecosystem Assessment) Programme**

UK Government has set world-leading ambition on protecting our natural assets, internationally through the Convention of Biodiversity and domestically via the ground-breaking 25 Year Environment Plan. Intrinsically linked to the successful delivery of Net Zero, protecting our environmental services has never been more vital. Achieving these goals is underpinned by the provision of systematic and robust evidence. For the first-time, Defra are developing a programme to deliver up-to-date, UK-wide environmental data to allow for agile policy making grounded in the best available evidence – to truly understand where we are and where we need to get to.

Currently in a pilot phase, NCEA is a transformative programme to understand the extent, condition and change over time of environmental assets across England's land and water environments, supporting the government's ambition to improve the environment within a generation.

The [Peat Action Plan](#) sets out Defra's ambitions for reversing the decline of England's peatlands. Defra's aim is to prevent further loss of peatland habitats and to restore more peatland landscapes to their natural state. Re-wetting peatland areas and returning them to their natural state could make a significant contribution to achieving our targets on reducing carbon emissions, as well as having other benefits for water quality, nature, and flood mitigation.

The Action Plan sets out a commitment to "develop a more up-to-date and detailed England peat map by 2024, establishing a clear evidence base on which to build."

The England Peat Map Project is part of the NCEA Programme, and is the initiative which will deliver this new evidence; this Contract forms part of the work to describe peat condition. Some basic information about the project is provided in the pdf attached in Appendix 1. Peat condition can be described in several different ways. Artificial drainage and erosion are both important elements affecting condition – much peatland is in poor condition because it has been extensively artificially drained to make it more suitable for agricultural or forestry land uses, and active peat erosion results in the loss of significant quantities of carbon.

There is great value in being able to map these features accurately, consistently, and extensively, as such data can be used to:

- help target peatland restoration activities,
- support flood risk management, and
- improve our ability to estimate greenhouse gas emissions from peatlands.

The ability to identify and map artificial peat drains and active peat erosion features in upland peatland landscapes has already been established, by a number of organisations, researchers and various approaches. Typically, a mixture of field survey mapping and digitising from air photographs has been used at site scale, but these techniques are expensive, labour-intensive and time-consuming.

The use of Light Detecting and Ranging (LiDAR) data presents opportunities for lower cost, more rapid semi-automated methods of mapping these features, offering consistent outputs and accuracies across large areas. It is no longer 'new' in this context, and some valuable work has already been undertaken on Dartmoor and the North and West Pennines. But these approaches have not yet been developed for the production of national outputs.

The Environment Agency's National Lidar Programme aims to complete the coverage of England with lidar at an approx. 1m sampling intensity, by the end of 2021. This means new lidar data will become available for large upland areas previously unmapped with this technology.

The England Peat Map will therefore aim to use NLP data to develop national (England-wide) map outputs of grips, gullies, and peat hags, building on lidar techniques already developed and used effectively elsewhere, and scaling them up.

#### **Relevant publications and reports describing grip and gully mapping methods using lidar:**

Carless, D. et al (2019), 'Mapping landscape-scale peatland degradation using airborne lidar and multispectral data', *Landscape Ecology* 34: 1329-1345. <https://doi.org/10.1007/s10980-019-00844-5>

Evans, M. and Lindsay, J. (2010), 'High resolution quantification of gully erosion in upland peatlands at the landscape scale', *Earth Surface Processes and Landforms* 35: 876-886. DOI: 10.1002/esp.1918

## **Authority Requirements and Objectives**

### **Overall aim**

The overall aim of this Contract is to develop and test processing workflows for National Lidar Programme data to extract and describe small upland drainage (grips) and erosion (gullies and peat hags) surface features relevant to peatland condition. The features will be identified from specific test areas, and validated against mapped data to determine the accuracy of the methods and outputs, but the workflow processes will be developed with a view to automation and scaling-up their application to enable processing of all upland NLP

data to create detailed national maps in 2022/23. Accuracy, automation and scaling-up issues will be identified and discussed with recommendations proposed on how to establish the optimum processes. Feature definition issues will also be discussed (e.g. up/down-stream limits to gullies) as it will be important to understand and communicate to end-users how the method of identifying each feature type will inform appropriate use.

### Detailed aims and objectives

#### Development of script-based lidar processing workflows.

The Supplier will develop script-based lidar processing workflows to identify and extract moorland grips, gullies and peat hags as accurately and completely as possible, from National Lidar Programme 1m data, at specific test areas. Currently available lidar data is at <https://environment.data.gov.uk/> and the EA Lidar Capture Plan is available at <https://environment.maps.arcgis.com/apps/opsdashboard/index.html#/27d3192741ce48dfabdeb20f3d740bc7>.

The workflows should be developed according to the following principles:

- They will be designed to scale-up and process large volumes of NLP data to create national grip, gully and hagg maps to a consistent standard of known quality
- They maximise automation of processing steps, and minimise unnecessary manual intervention
- They will seek the optimum balance between capturing features comprehensively and generating unwanted 'noise' in the output data. Less noise means less manual cleaning and intervention hence greater automation, consistent output and lower cost. However, these benefits must be balanced against the risk that real features are not detected in the data. The Supplier will propose metrics to quantify noise and accuracy.
- They will attempt to establish useful and appropriate criteria to define grips, gullies and peat hags (e.g. based on size ranges, or other characteristics that can be extracted from the lidar data), to facilitate understanding of the output data and their limitations, and to help discriminate, for example, man-made grips from other natural drainage features or from larger man-made ditches or small streams.
- Use ESRI ArcGIS Pro tools and Python or R scripts for the technical processing steps
- Workflows and scripts must be easily transferable to Natural England's IT systems and infrastructure
- Produce fully documented code and additional guidance and instruction on its use, to enable NE staff to use it and adapt/improve it
- The Supplier will note particularly the contractual clauses relating to not infringing any third party's Intellectual Property Rights, Natural England's ownership of newly created Intellectual Property, and Natural England's intention to publish any contract outputs including workflows, scripts and data under Open Government Licence (OGL).

The Supplier will demonstrate careful consideration and exploration of a range of processing methods and approaches including those used by authors of the papers listed above, paying particular attention to the opportunities offered by:

- Detrended lidar digital terrain models, and the recent 'double detrended' method developed by Environment Agency Geomatics Team, as described in Appendix 2, to map grips. The Supplier will take full advantage of the opportunities offered by the 'double detrended' (DDT) lidar processing method described. The NE Project Officer will provide scripts developed using ArcGIS Pro to enable the Supplier to create DDT lidar data from NLP lidar data. Parameters in these scripts can be altered which may improve the quality of outputs; the Supplier should explore the opportunities this presents and how altering these parameters, or adjusting the model workflow, can impact the quality of the grip outputs differently in different areas.

- Topographic analysis tools (e.g. Evans and Lindsay (2010) used planform curvature in their gully-mapping workflow; surface roughness metrics may be useful in detecting peat haggings, etc)
- Hydrological analysis tools (such as flow accumulation, which can be used to inform gully size, indicating potential erosion risk)
- Deep Learning approaches may be considered

The Supplier will consider, and build into workflows where appropriate, additional spatial data that can be used to mask out areas where features are not expected. Such data may include, for example, land use/cover data (to restrict the processing to particular land cover types where peat and grips, gullies and haggings occur), urban /built-up areas and transport networks (to eliminate roads, tracks). Natural England can provide a range of additional licenced GIS data including OS map products, to the Supplier on request to [data.services@naturalengland.org.uk](mailto:data.services@naturalengland.org.uk). Further details are available at <https://www.gov.uk/guidance/how-to-access-natural-englands-maps-and-data>.

#### Use of Test Areas:

The Supplier will develop and test their methods using lidar and mapped surface features data from the following test areas:

- Test Area 1 – Yorkshire Dales (Appendix 3)
  - Test area 1 is located on the Moors surrounding Swaledale, including Arkengarthdale and Melbecks Moors as well as Abbotside Common. The area consists of both mapped grips (~5,500 features) and areas of haggings peat (~30 hectares).
- Test Area 2: - Forest of Bowland (Appendix 3)
  - Test area 2 is in the south west of the Forest of Bowland on and around the Bleasdale Moors between Oakenclough and Dunsop Bridge. The area contains both mapped grips (~400 features) and gullies (~700 features) as well as areas of haggings peat (~120 hectares).

Natural England will provide the Supplier with all validation data for which it has the required permissions.

#### Output Data Requirements:

**Grips data output requirements:** Mapped grips data will be in the form of vector lines, topologically correct and connected where lidar data indicates these features are connected on the ground. Grip lines will be attributed to indicate length, width, depth dimensions, slope and catchment area draining into the features, and how these change along the length of the grips (e.g. by dividing grips into standard section lengths). The Supplier will be expected to develop a workflow for grip mapping that generates higher quality output – i.e. less noise (spurious vector lines not representing meaningful drainage), more grips identified - than the example provided in Appendix 2, which is based on the Environment Agency's DDT lidar DTM and process. This may be achieved through a combination of automated (preferably) and manual (if needed) cleaning processes.

**Gully data output requirements:** Mapped gully data will be in the form of vector lines and/or polygons, attributed to indicate length, width, depth dimensions, slope and catchment area draining into the features, and how these change along the length of the gully features. Features should be topologically correct, and connected into a network of gullies if the lidar data indicates this is how these features are described on the ground. The Supplier should consider the upstream and downstream limits of the gullies and the criteria required to define those. Attribution describing gully profile shape type (e.g. 'U-shaped', 'Flat-bottomed', etc) should also be included if this can reliably be determined from the data.

**Peat Hagg data output requirements:** Mapped peat hags data will be in the form of vector points, lines or polygons, describing either individual hags (attributed with an estimate of hagg height above the surrounding peat surface) or dense clusters of hags or haggings (attributed with a suitable metric such as surface roughness or similar, to describe the degree of haggging if a meaningful measure can be obtained).

**Open Data requirements:** Our aim is to publish all EPM outputs under [Open Government Licence](#). Non-Open data sources may be incorporated into workflows if useful, but only if the Supplier obtains written permission, ideally in the form of a licence, from the data owners for Natural England to use their data in our workflows and publish outputs derived from them under OGL. If there is a charge for any additional data, Natural England must purchase the data and sub-license it to the Supplier.

The Supplier will work with the Natural England (NE) Project Officer, NE Specialists and other NE staff as co-ordinated by the NE Project Officer, to review workflow outputs to confirm usability, and to achieve the highest quality outputs for each feature type.

All workflow outputs, scripts, tools and documentation will be provided to the NE Project Officer. All spatial data will be supplied in Shapefile or ESRI personal geodatabase format, in British National Grid projection, with accompanying UK Gemini-standard metadata.

#### [Validation of the data outputs](#)

The Supplier will validate the outputs using existing mapped feature data (which is licensed for these purposes) provided by the NE Project Officer for the test areas, and/or detailed APGB air photography covering the agreed test areas. Natural England can provide APGB high resolution imagery under licence to the Supplier on request to [data.services@naturalengland.org.uk](mailto:data.services@naturalengland.org.uk).

The Supplier will also work with the NE Project Officer and expert members of NE staff who have detailed field-based knowledge of the test areas, to supplement quantitative validation with expert opinion.

Validation methods and results will be fully described and discussed. This will include consideration of 'noise' in the data outputs, as well as the limitations of the lidar data in terms of ability to isolate and identify small features e.g. narrow grips, or small peat hags. The ability of the data to avoid confusing grips with other linear features such as tracks, walls, fences etc, or confusing gullies with similar-size features incised into the landscape like roads, or rivers, will also be addressed.

#### [Project Report](#)

The Supplier will provide a Project Report, to include:

*An Executive Summary (no more than 2 sides of A4 text)*

*A detailed technical description of all the work undertaken, including*

- The development of different approaches and methods that were explored, and supporting reasons for choices made, particularly of final workflow processes
- Lidar data acquisition and preparation, analytical processes, validation methods and results, any manual editing steps required together with resources used
- Workflow process diagrams will clearly indicate the different processing steps, scripts and parameters, data inputs/outputs, etc.



- Processing issues encountered, with workarounds and recommendations for solutions
- Description of all data and scripts provided

A *general discussion* section, covering at least the following:

- the quality of the output data,
- strengths and weaknesses of different approaches, methods, and processes considered,
- issues including automation, accuracy and scaling-up to produce outputs across England, and how to balance these and how best to manage or overcome them.

A *Lineage* section listing and describing all events and source materials that went into this work, processes used, and quality control processes, etc.

*Recommendations for improvement and next steps* - e.g. use of other (Open) data and/or processing/modelling techniques, additional manual input/intervention etc, how these improvements might best be achieved and the estimated costs of doing so.

## Outputs

- Workflow process descriptions, diagrams
- Model scripts (with inline documentation)
- Test area case studies with intermediate/stage and final output data for grips, gullies and peat hags as map layers. Intermediate/stage outputs can include outputs such as topographic index rasters used during the processing of lidar data to create final products (e.g. surface roughness index, planform slope, de-trended lidar DTM)
- Training workshop(s) within the final month of the project, including documentation and data, to go through each workflow end-to-end with the NE Project Officer, demonstrating each step including where manual editing or checking is required, to create outputs.
- A Draft Project Report, to be submitted to NE Project Officer for comment approx. 1 month prior to project completion
- A Final Project Report, to be submitted to NE Project Officer for final comment and sign-off approx. 1 week prior to project completion as described above.

## Project Management

The Supplier will manage the Contract to meet the following requirements:

- A Project Management Plan will be developed – to include delivery milestones, timetable, and resource allocation to different stages and activities
- Project Meetings: A Project Start-up meeting (to include a presentation on the Supplier's understanding of requirements and proposed activities), regular virtual fortnightly progress meetings, and a final Project Close meeting to review and approve final outputs and conclude the project.
- At least one Project Workshop – to review draft outputs with NE Project Officer and key users, allowing for adjustments to processes to be made before creating final outputs and validating them.
- Progress reports – fortnightly, to be circulated at least 2 days prior to fortnightly project meetings

- The Supplier will need to provide evidence of their knowledge and understanding of data protection legislation and regulations, including evidence of effective management of personal data from other projects they have undertaken
- Payments and milestones:

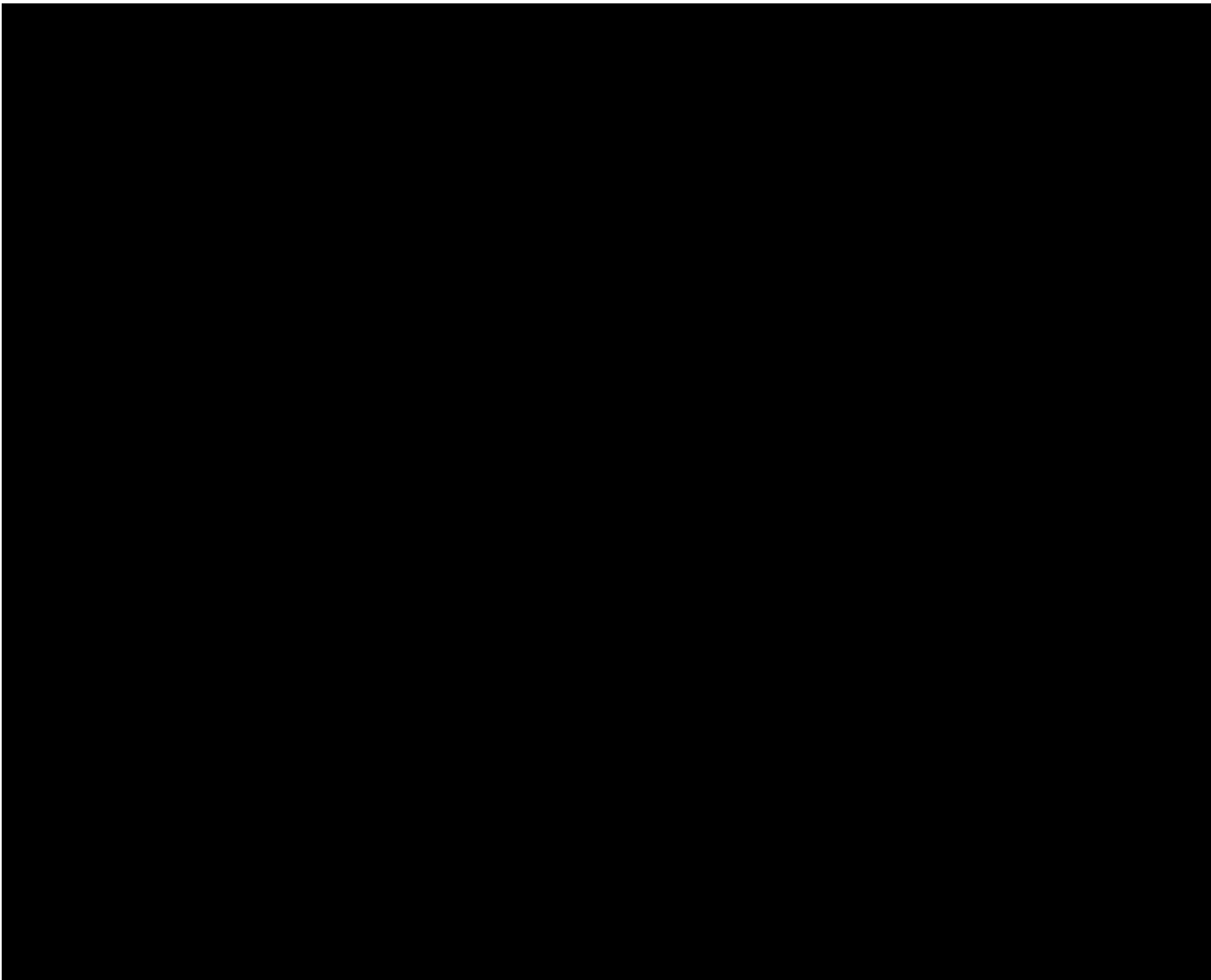
| Milestone                        | Payment Schedule    | Date       |
|----------------------------------|---------------------|------------|
| Project Start-up Meeting         |                     | By 7/1/22  |
| Workshop to review draft outputs |                     | By 21/2/22 |
| Draft Report submitted           | First payment (40%) | By 28/2/22 |
| Training workshop                |                     | By 31/3/22 |
| Final report signed-off          | Final payment (60%) | By 31/3/22 |

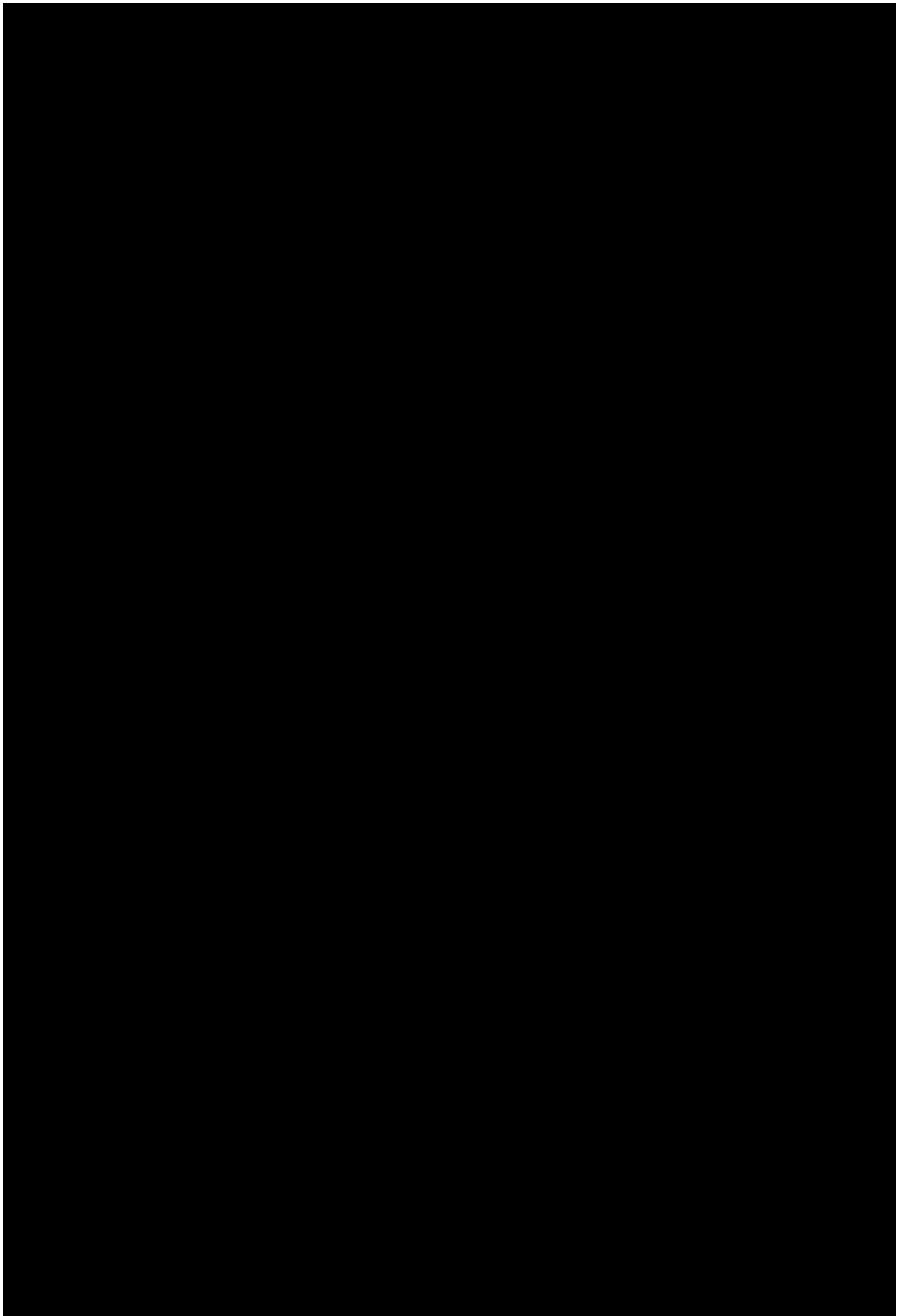
#### Contract Period

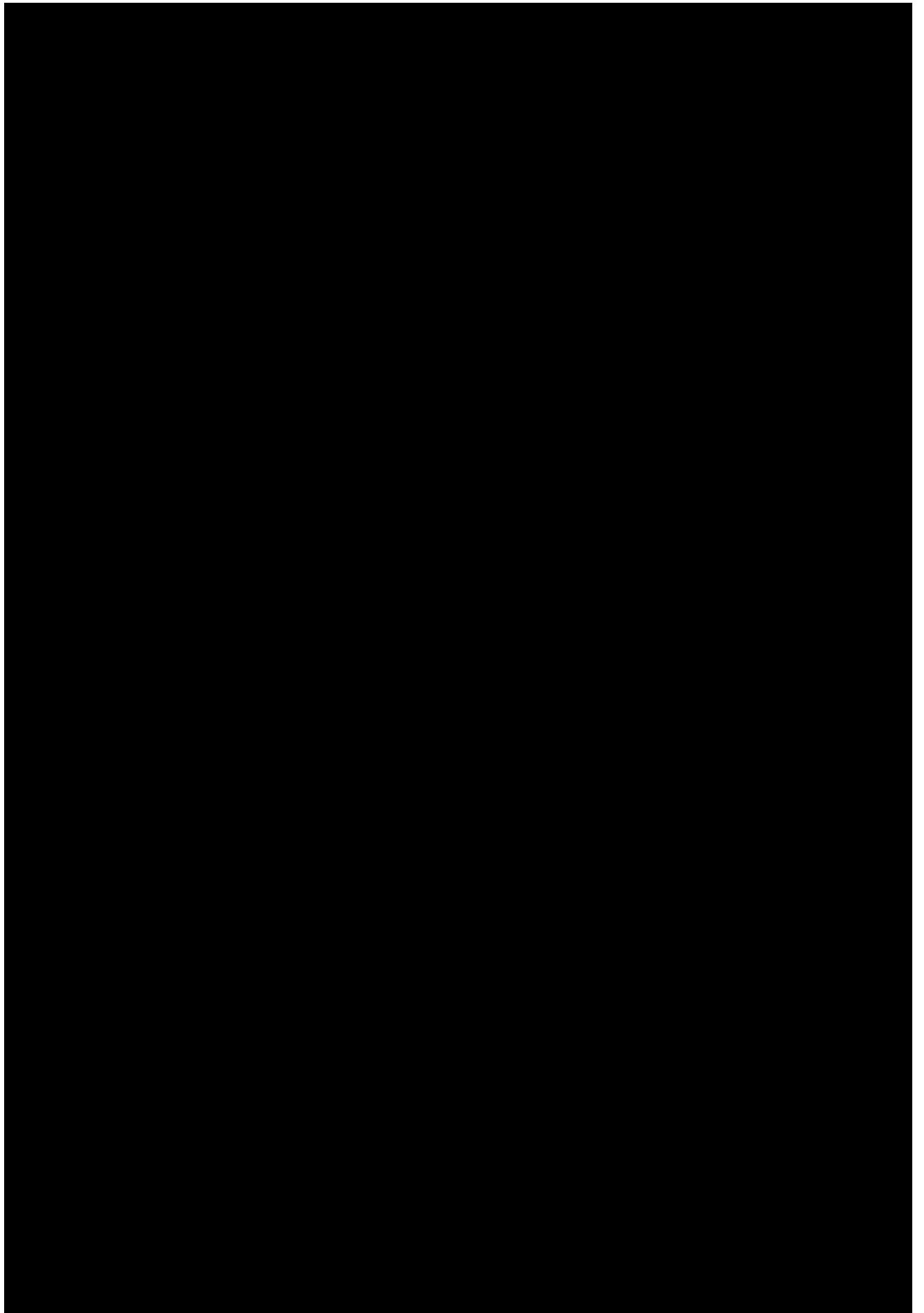
The Contract shall run from 3 January 2022 until 31<sup>st</sup> March 2022.

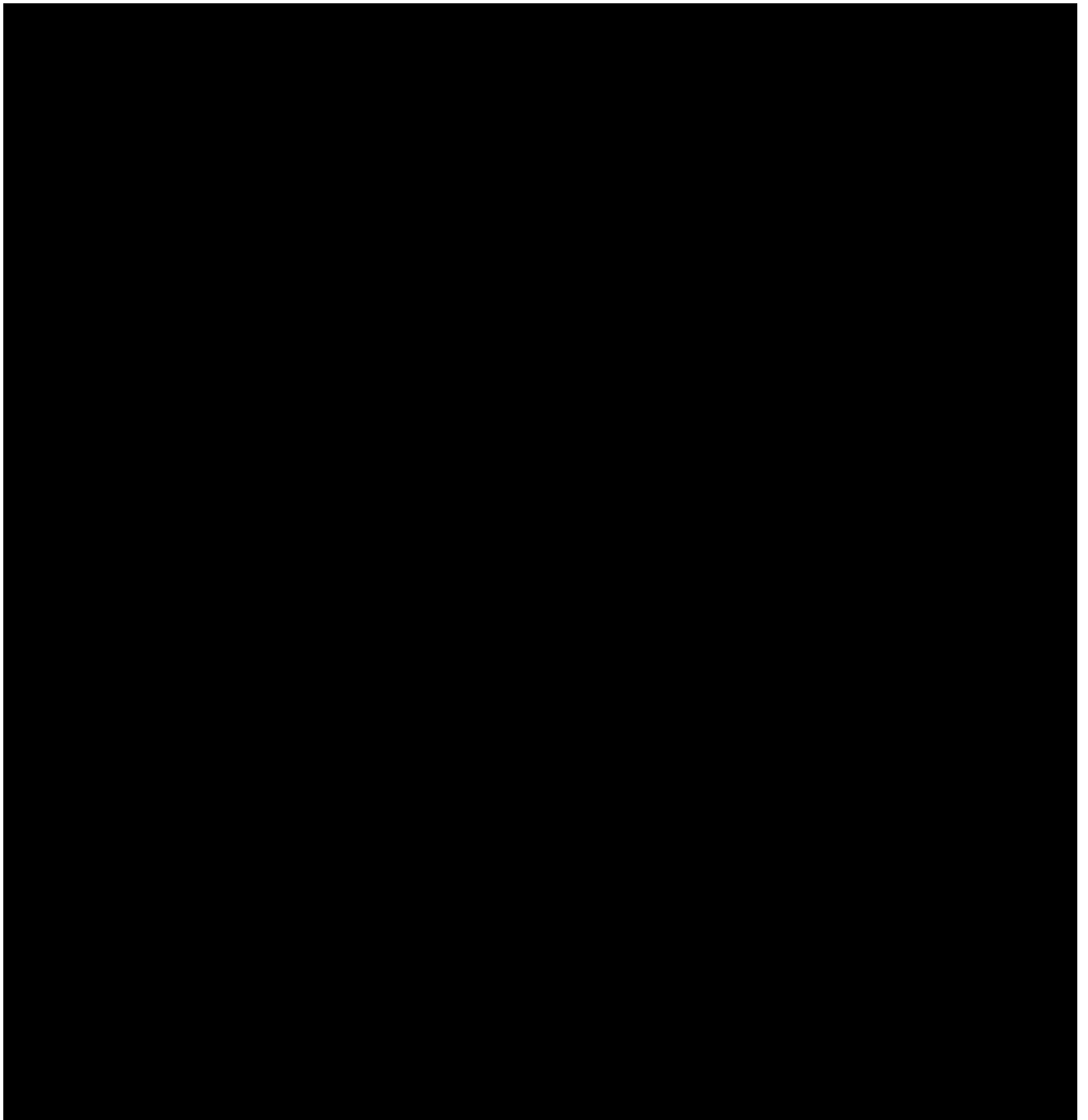
#### Travel and Subsistence

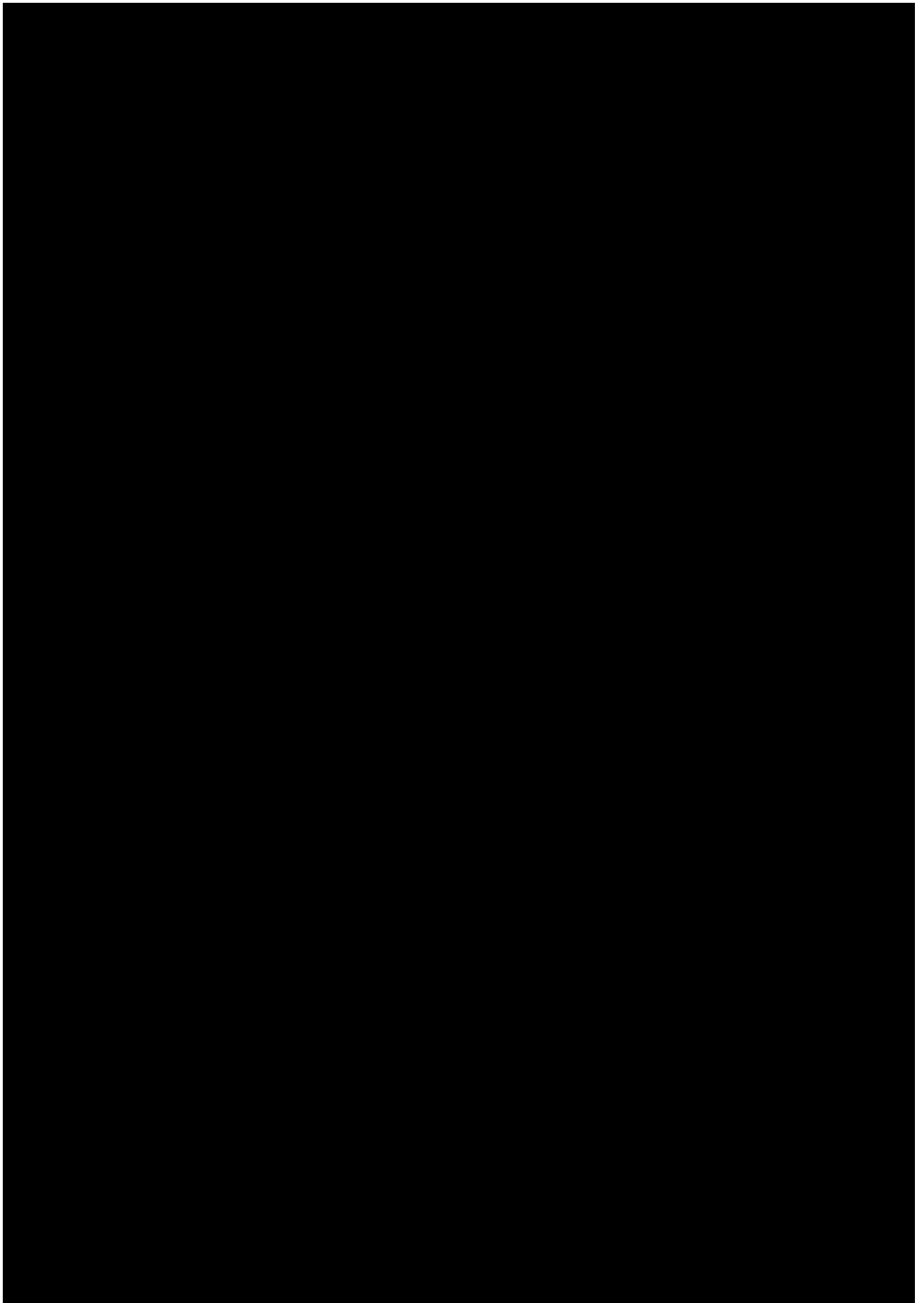
All Travel and Subsistence should be in line with Natural England's Travel and Subsistence Policy. Claims should always be supported by valid receipts for audit purposes and must not exceed any of the stated rates in the Request For Quote. Should the stated rate be exceeded, Defra reserve the right to reimburse only up to the stated rate.

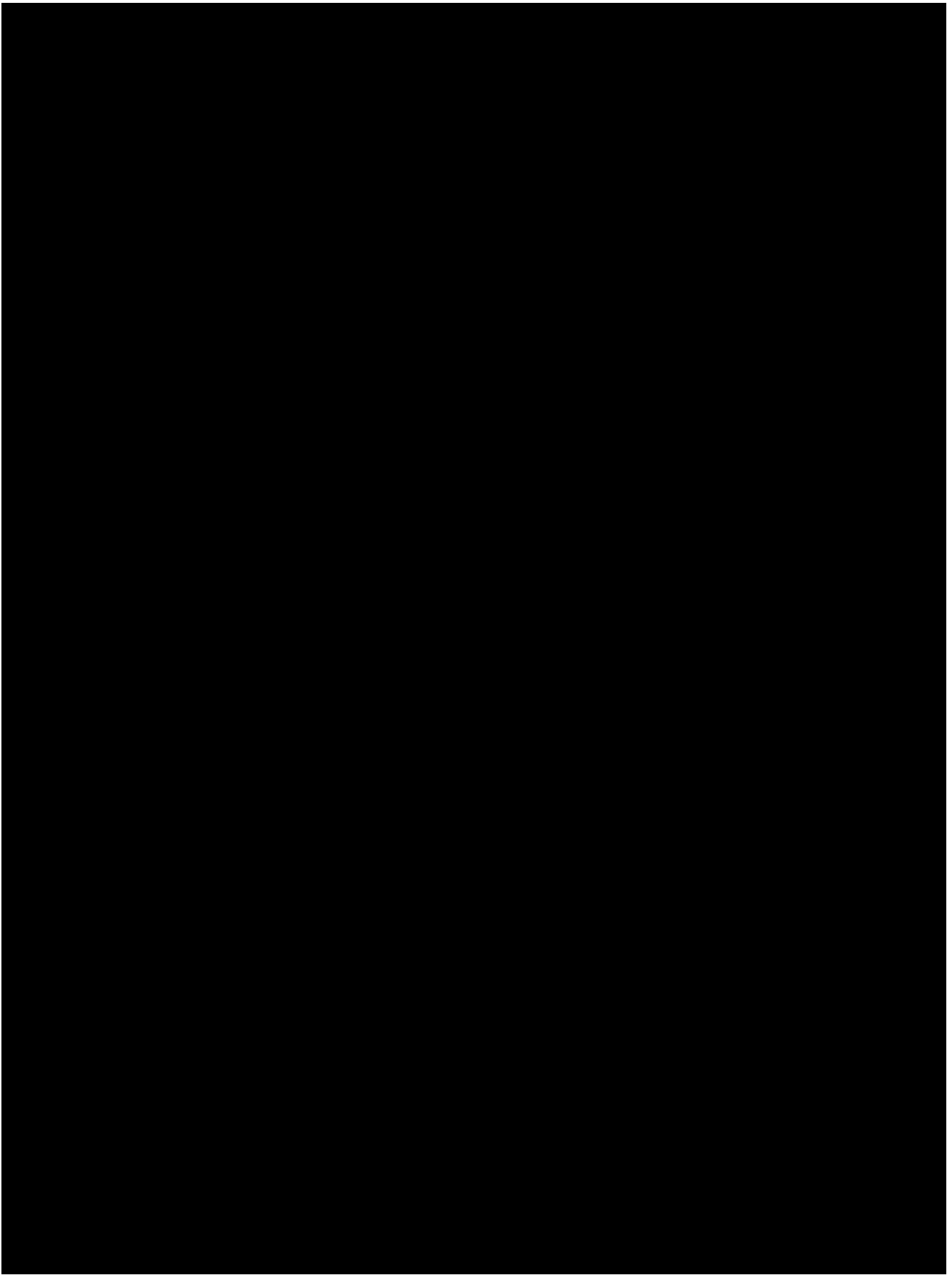




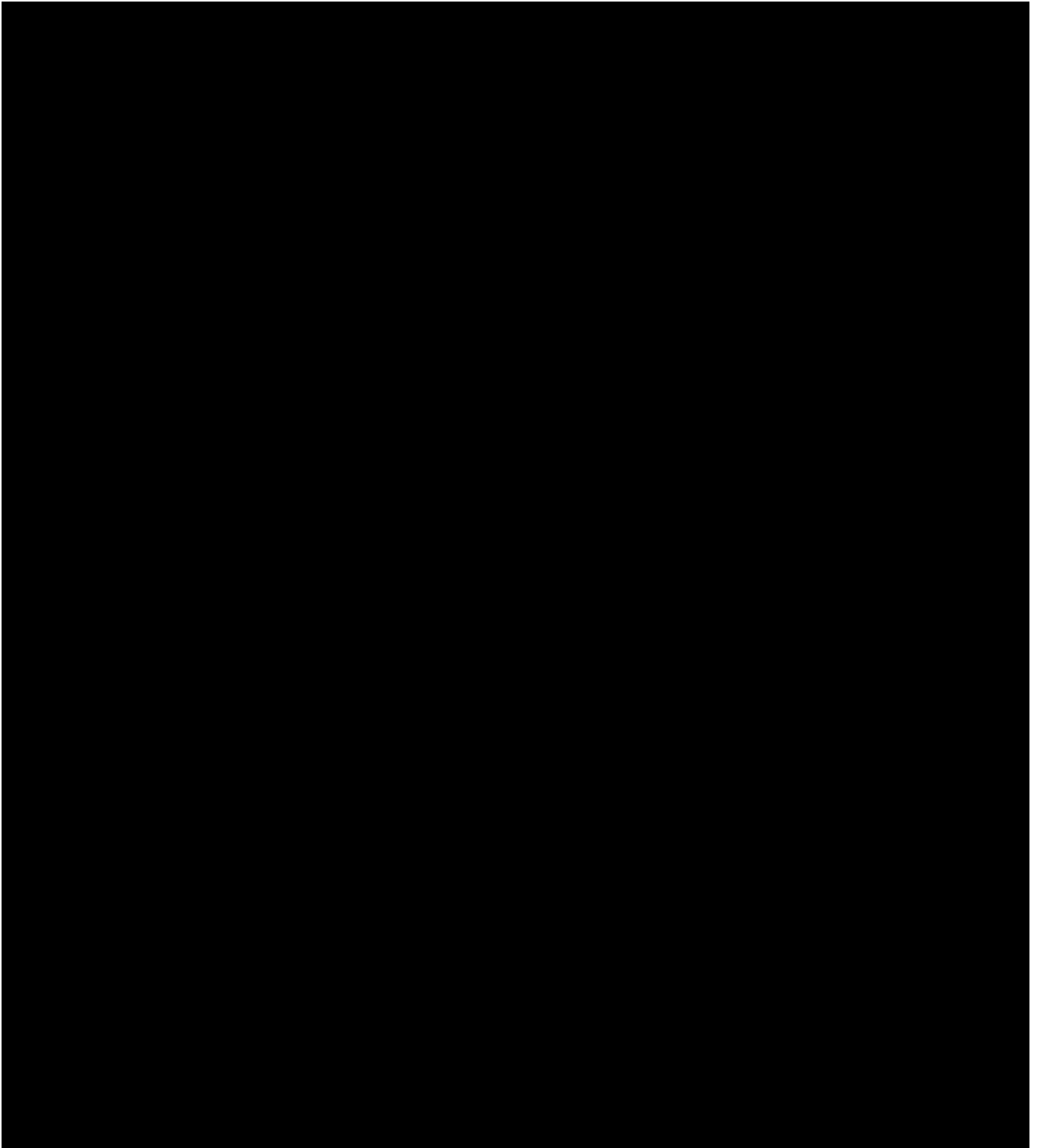


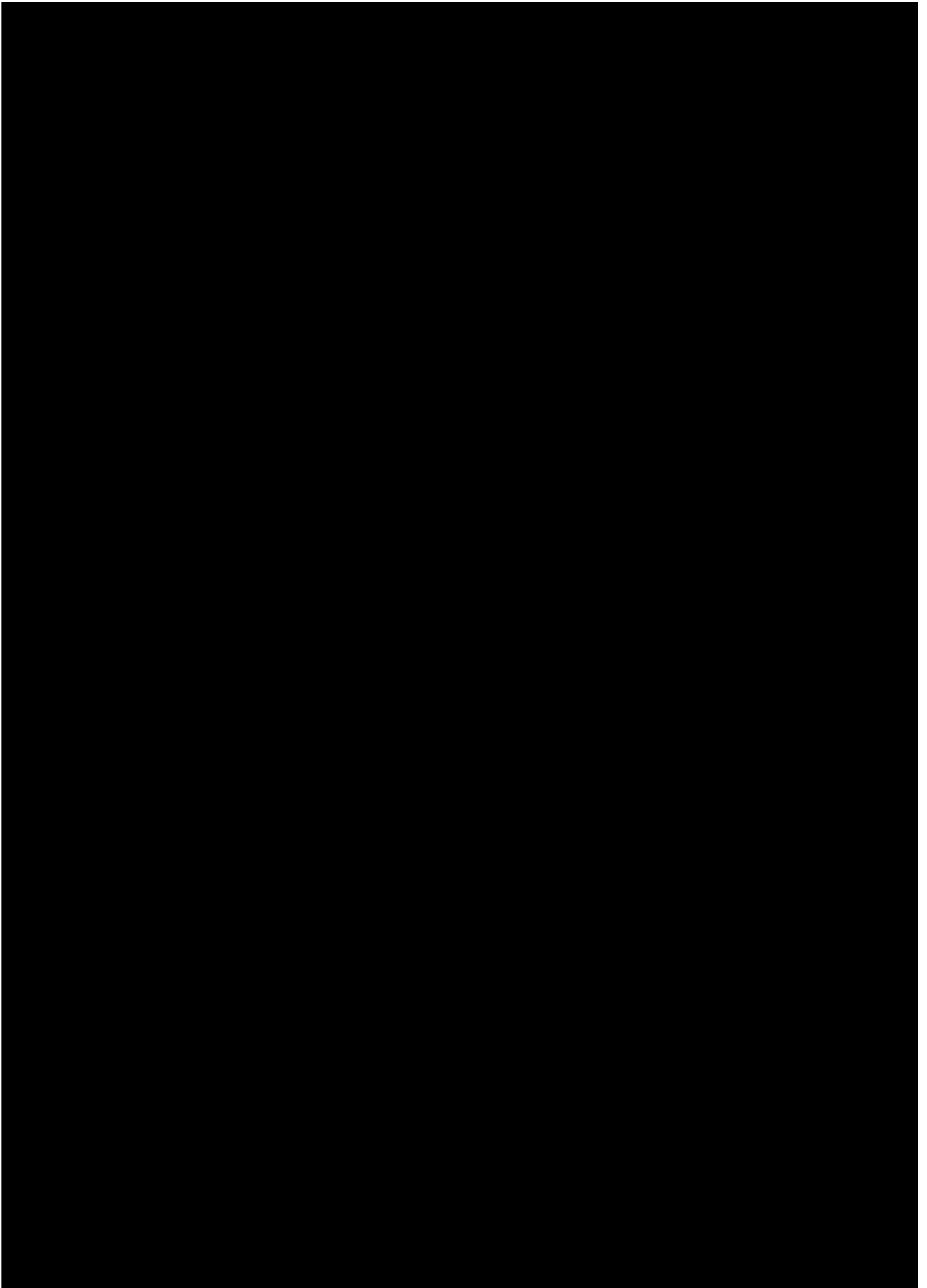












## SCHEDULE 2 – PRICES

The total fixed Price of the Contract Period will not exceed  
£45,600 excluding VAT  
**£54,720 including VAT**

