Ecological Land Cooperative
For a living, working countryside

Invitation for tender for works at ecological smallholding development at Orchard Park, Rilla Mill, Cornwall

Section I: Client

I.1) Name and addresses

Ecological Land Cooperative
Unit 2, Wild Goose Space
228 Mina Road
Bristol
BS2 9YP

0117 269 7425

I.2) Communication

The procurement documents are available for unrestricted and full direct access, free of charge below:

Site Title Plans
Plots submitted in planning applications
Proposed block plan and development area
Barn elevations
Site address: Orchard Park, Netherton, Rilla Mill, Cornwall, PL14 5BD
Site location 50° 31' 48.3006" N 4° 25' 15.3732" W

Additional information on the commissioning organisation can be obtained from this address
The Ecological Land Cooperative

Tenders or requests to participate must be submitted using this form:
https://forms.gle/uPPfysN8u6KtiMwq9 by **28th July 2023 at 5pm.**

Any questions can be emailed to stella@ecologicalland.coop

I.3) Main activity

Energy
Construction
Agriculture

Section II: Object

II.1) Scope of the procurement

II.1.1) Title

Area: South-West England

Procurement for the design, build, operation and maintenance of shared infrastructure, renewable energy and associated groundworks to support the development of an agroecological multi-smallholding site. Tender applications can be comprised of one or a combination of the lots listed below:

II.1.2) Lots

SHARED INFRASTRUCTURE
LOT 1: Construction of timber frame barn and rain water harvesting

EARTHWORKS
LOT 2: Groundworks, to include improving access along lane, additional track way and area of hardstanding for barn
LOT 3:
3.1 Design and/or
3.2 installation of reed bed systems for 3 smallholdings, to include irrigation ponds and water landscaping

ENERGY
LOT 4: Solar PV array mounted on a shared barn
LOT 5: Feasibility study for and installation of small wind turbine (subject to planning permissions and successful feasibility study)

II.1.3) Type of contract

Works

II.1.4) Short description

The Ecological Land Cooperative are seeking to appoint suitably qualified, accredited and experienced Contractors to provide building works for a highly sustainable, exemplar cluster of smallholdings in Cornwall.

The project scope will include the design, supply and build of contracted Lots as well as maintenance for a bedding-in period of one year.

This is an invitation to tender for the supply of barn, grey water systems for 3 residential smallholdings, rainwater harvesting, provision of solar PV array, and other groundworks.

Contractors will be expected to work with the Ecological Land Cooperative, plus our key delivery partner Agile Homes, to develop the site infrastructure needed for small farm businesses on the site. We also expect contractors to work in alignment with ecological systems using regenerative principles, in line with the ELC's aims and objectives.

II.2) Description

II.2.1) Context and background of commissioning organisation

Vision and Objectives

The Ecological Land Cooperative was set up to address the lack of affordable sites for ecological land-based livelihoods in England and Wales. There is a disconnect between the combined cost of land and rural housing, and the income that is usually derived from sustainable rural livelihoods.

Sustainable rural livelihoods - such as small-scale ecological food production - protect the environment and reduce greenhouse gas emissions. Such businesses help build a vibrant, living countryside in which people flourish alongside our cherished landscapes and natural biodiversity, and have an important role to play in ensuring food and energy security. They also provide employment, access to local food and crafts, and educational opportunities for urban visitors, helping to maintain rural skills and to improve ecological literacy. Our mission is to increase access to land for such livelihoods.

Our solution and core business is the creation of small clusters of three or more affordable residential smallholdings. As well as land, we provide smallholders with permission to build their own sustainable home, and with utilities and road access. Our model allows us to keep costs low, both through buying larger sites at a lower price per acre, and through distributing the cost of infrastructure, planning applications and subsequent site monitoring across a number of smallholdings. The model allows the smallholders to work and learn together and to provide mutual support. Our cooperative retains the freehold on each smallholding in order to protect it for agricultural and ecological use, and as affordable in perpetuity.

Beyond this, our vision is one where land is valued and used as a means to enhance our collective good. At present land in the UK is the target of financial speculation; in contrast, our model champions a collective, ecological and cooperative vision of land ownership and land use.

II.2.2) Description of the procurement

The site at Orchard Park near Callington in East Cornwall is the Ecological Land Cooperative's (ELC) fifth site. The site successfully secured temporary planning permission in November 2022 for a cluster of three low impact, residential, agroecological smallholdings of 3.7, 5.5 and 10 acres respectively.

Each smallholding plot will be let to new entrants to ecological farming and landwork on a secure 150 year lease.

Orchard Park will be an exemplar of ecologically exceptional infrastructure to enable rural livelihoods, providing a resilient and sustainable long-term base for families and individuals to access opportunities into farming.

In order for the farmers to build their businesses in a resilient and sustainable way the ELC is seeking to supply farm infrastructure, site wide water harvesting, purification and storage solutions alongside highly specialised, low carbon dwellings to be provided by our key delivery partner: Agile Homes.

We will work with Agile Homes to install low impact, planning permission compliant, modular dwellings on the land to make the new entrants' transition to their smallholdings as easy as possible. Agile designs, manufactures and delivers safe, civil, low carbon, affordable, modular homes using a 'fabric first' approach of sustainable bio-based materials (timber and straw), for people in housing need.

The key features of the dwellings:

- Meet Future Homes Standard 2025 (better than Building Regulations);
- Have a 60 year design life and meet Nationally Described Space Standards;
- Capture carbon in manufacture through the use of bio-based materials (timber and straw for example) in construction;
- The panels will be manufactured off site, in commercial or prison workshops, and assembled on site;
- Super-insulated, triple glazed, air tight, light, open plan and very energy efficient.

The works to be undertaken by the Contractor can relate to one or more of the lots on offer and we would hope to match contractors in innovative partnerships based on best skilled in each area. Contractors may wish to apply for the entire contract or elements of each lot.

The Contractor should design each element for delivery taking into consideration the entire site and its combination of systems. Design should also take into account the ecologically diverse, productively farmed landscape, where developments must not negatively affect the visual amenity of the surrounding area or impact harshly on the ecology of the site. All efforts should be made to ensure minimal negative impacts to biodiversity during the building processes and encouraging improvements in levels of native flora and fauna thereafter.

II.2.3) Description of Lots

The Contractor shall provide:

Shared infrastructure - LOT 1

1. Design, manufacture and on site installation of a timber frame barn as per dimensions specified in 'Barn Elevations' document
2. To use sustainably grown timber, locally sourced where possible
3. Project management of the works including progress reporting to the Ecological Land Cooperative
4. Undertaking of all necessary structural calculations for footings/ foundations and installing these as specified
5. Delivery and plant hire costs alongside any other 3rd party costs associated with the barn build such as structural engineer, MEWP, crane hire and scaffolding
6. Provision of portable power supply or battery operated tools whilst on site
7. External features such as cladding, window and lockable door to plant room.
8. Heavy duty guttering and downpipes into x 2 10,000 litre Rainwater harvesting tanks

Earthworks - LOT 2

Working closely with our key delivery partners Agile Homes who will be supplying the on site dwellings, the earthworks contractor should estimate for the installation of trackways as per 'Proposed block plan and development area' drawings and improvements works to the existing track.

The existing track is approximately 42 metres in length and is a traditional banked up tree lined lane. The track at present is at points very narrow, it has been recently scraped. Due to the increased volume of traffic to site a more durable surface in parallel tram line under the tire tread will be needed

New trackway to run from Eastern gateway to gateway at field boundary

To join the area of hardstanding as per drawings above.

Water retention and filtration landscape - LOT 3:

3.1 Design, costings and technical drawings for:
3.2 and installation of:

1. Reed bed grey & black water systems to process waste water from dwellings and businesses which could include water heavy processes such as micro dairies and salad washing.
2. Circular water systems for 3 smallholdings, to include irrigation ponds and water landscaping, groundworks to include swales on contour to utilise rainwater harvest water across the entire site.
3. All associated piping and pumping mechanisms to be as low power, innovative and passive as possible.
4. Provision for the addition of swales on contour to encourage water retention in the landscape, this will be overplanted by shelter belts of native trees and shrubs.

5. During the groundworks there will be a need for trenching for mains power connections to the central point between Agiles Homes dwellings. Agile will then make the final connections to the dwellings.

ENERGY

LOT 4: Solar PV array mounted on a shared barn

The design and delivery of a state of the art solar PV system with minimum requirements as follows:

System size minimum

Solar system 10kW
Battery bank 20kWh
Generator 8kW

General requirements - 10kw system providing power and lighting to each bay in the barn.

Preferences of:

1. PV panels not supplied from China
2. Lithium batteries
3. Guarantee on works
4. Requirement to visit site 1 year after install to provide settling in advice to steward farmers

LOT 5:

Feasibility study for and installation of small wind turbine (subject to planning permissions and successful feasibility)

The scope above is not intended to be exhaustive but the sub-contractor(s) will be required to deliver all aspects of the systems necessary to safely operate on the site

II.2.4) Award criteria

We expect sub-contractors to have a considered approach to the following:

- Strong emphasis on sustainable development and the choice of materials and their performance to maximise durability and sustainability
- Commitment to providing services in a way that promotes equal opportunities
- Adhere to current Health and Safety guidance and ensure levels of insurance indemnity appropriate to works

- Willingness and ability to work in line with other project delivery partners to maintain a joined up approach to the whole site
- Carry out planned works in 2024 according to order of works timeline beginning with Groundworks in January 2024

We are inviting proposals from sub-contractors measured against the following criteria:

Technical Requirements / Weighting: 25%
Sustainability / Weighting: 25%
Proximity to the site/ southwest region / Weighting: 15%
Construction Approach / Weighting: 10%
QHSE / Weighting: 10%
Price / Weighting: 10%
Displaying innovation: 5%

II.2.5) Duration of the contract

Timescales of site development

Deadline for tenders: 5pm, 28th July 2023
Design Phase: Begins September 2023
Building phase: Begins January 2024
Maintenance: 12 months from completion of building phase

N.B. work is to be carried out in 2024, this should be reflected in the budgeted materials cost